DOCUMENT RESUME

ED 206 850 CE 029 935

AUTHOR	Siegel, Irving H.
TITLE	Fuller Employment with Less Inflation.
INSTITUTION	Upjohn (W.E.) Inst. for Employment Research, Kalamazoo, Mich.
REPORT NO	ISBN-0-911558-85-3
PUB DATE	81
NOTE	230p.
AVAILABLE FROM	W.E. Upjohn Institute for Employment Research, 300 S. Westnedge Ave., Kalamazoo, MI 49007 ($6.00; quantity discounts available)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Business Cycles; Economic Change; Economic Climate; Economic Development; *Economic Research; Economics; Federal Legislation; *Inflation (Economics); Labor Economics; Poverty; *Productivity; Public Policy; *Statistical Analysis; Statistics; Taxes; *Unemployment
IDENTIFIERS	Employment Act 1946; Full Employment and Balanced Growth Act 1978; *Wage and Price Controls

ABSTRACT

This series of 10 essays, written at various times since the mid-1960s, explores the U.S. economy's proneness to both high inflation and high unemployment during this period. The essays present ideas that the author believes could have reined in price increases in the early stages, and that presently could speed the reduction of inflation and reduce the pain of its accompanying unemployment. The first chapter sets the tone for the book with a brief description of the origin and development of the inflation-unemployment syndrome in light of the provisions of the Employment Act of 1946 and its 1978 amendments, the Humphrey-Hawkins Full Employment and Balanced Growth Act. It also considers the spectrum of authoritative prescriptions for disinflation of the economy. A major theme of the essays is the desirability of complementing the standard fiscal and monetary approaches toward counterinflation with a special supply-side tax or income policy that gives workers an incentive to forego pay increases exeeding the prospective national rate of productivity advance. The second recurring theme is the improvement of statistics for use in the wage-price monitoring, another round of which should not be ruled out, according to the author, despite disappointing past experience. In this context, designs are offered for statistical systems in which hourly earnings, unit labor cost, productivity, and prices are treated symmetrically; and in which, alternatively, aggregates such as payrolls (or total factor income) and real output suffice and productivity estimates are not needed. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED206850

fuller employment with less inflation

Irving H. Siegel

CE 029 935

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
S. Bennett
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

The W.E. Upjohn Institute for Employment Research

Library of Congress Cataloging in Publication Data

Siegel, Irving Herbert.
Fuller employment with less inflation.

Includes bibliographical references.
1. United States—Full employment policies—Addresses, essays, lectures. 2. Wage-price policy—United States—Addresses, essays, lectures. 3. Unemployment—United States—Effect of inflation on—Addresses, essays, lectures. I. Title.
HC106.S53 1981 339.5'0973 81-11396
ISBN 0-911558-85-3 AACR2

Copyright © 1981
by the
W. E. UPJOHN INSTITUTE
FOR EMPLOYMENT RESEARCH

300 South Westnedge Ave.
Kalamazoo, Michigan 49007

THE INSTITUTE, a nonprofit research organization, was established on July 1, 1945. It is an activity of the W. E. Upjohn Unemployment Trustee Corporation, which was formed in 1932 to administer a fund set aside by the late Dr. W. E. Upjohn for the purpose of carrying on "research into the causes and effects of unemployment and measures for the alleviation of unemployment."

The Board of Trustees of the W. E. Upjohn Unemployment Trustee Corporation

Preston S. Parish, Chairman
Mrs. Ray T. Parfet, Vice Chairman
Charles C. Gibbons, Vice Chairman
D. Gordon Knapp, Secretary-Treasurer
E. Gifford Upjohn, M.D.
Mrs. Genevieve U. Gilmore
James H. Duncan
John T. Bernhard

The Staff of the Institute

E. Earl Wright, Director
Saul J. Blaustein
Judith K. Brawer
Phyllis Buskirk
H. Allan Hunt
Timothy L. Hunt
John R. Mekemson
Jo Bentley Reece
Robert A. Straits
Wayne R. Wendling
Jack R. Woods

Foreword

The W.E. Upjohn Institute is pleased to issue, in the public interest, a new and enlarged edition of *Fuller Employment with Less Inflation,* which first appeared as an Institute staff paper in January 1969. The continuing timeliness of the original title attests to the potential value of the incorporated essays to students of the contemporary economic scene. The contents should prove of interest not only to professional economists and statisticians but also to legislators, government policymakers, and the general public.

This edition adds six essays to the four that made up its predecessor. Two of the six (Nos. 6 and 8) have been printed earlier under the Institute's auspices. The author's prepared statement and answers to supplementary questions on the report of the Kerner Commission (No. 6) were published as a staff paper of the Institute in 1969 as well as in hearings of the Joint Economic Committee of the U.S. Congress. The other essay (No. 8) served as the introductory chapter to a volume based on the twentieth anniversary conference of the Institute; the volume was published by Augustus M. Kelley in 1967 by arrangement with the Institute, which also holds the copyright.

Facts and observations presented in this monograph are the sole responsibility of the author. His viewpoints do not necessarily represent the positions of the W.E. Upjohn Institute for Employment Research.

E. Earl Wright
Director

Kalamazoo, Michigan
July 1981

The Author

Irving H. Siegel, a consulting economist, received his Ph.D. from Columbia University. His doctoral dissertation, "Concepts and Measurement of Production and Productivity," was reproduced by the Bureau of Labor Statistics as a working paper for a national productivity conference in 1952 and was widely used by researchers and educators in many countries for almost another decade. Dr. Siegel has been associated with Johns Hopkins University Operations Research Office, the Twentieth Century Fund, and the National Bureau of Economic Research. In government, he served as assistant chief of the Productivity and Technological Developments Division of the Bureau of Labor Statistics, chief economist of the Veterans Administration, member of the economic staff of the President's Council of Economic Advisers, and economic advisor to the Bureau of Domestic Business Development in the Department of Commerce. He is a fellow of the American Statistical Association, the American Association for the Advancement of Science, and the New York Academy of Sciences.

Preface

The ten essays comprising this enlarged edition of *Fuller Employment with Less Inflation* are presented in reverse chronological order of their preparation. Four of the ten (Nos. 5, 7, 9, and 10) constituted the original 1969 edition. These four and two others (Nos. 6 and 8) were written and published while I was a staff member of the W.E. Upjohn Institute (1965-70) located at its Washington office. The remaining four essays (Nos. 1, 2, 3, and 4) are of more recent vintage; and, of these, the first (No. 1) was prepared especially for this enlarged edition.

From the beginning of my professional career, I had been interested in inflation and employment as separate areas of research; then, during my years with the Eisenhower Council of Economic Advisers (1953-60), I found good reason to join the two. In 1934-36, under the tutelage of Professor Willford I. King, I became acquainted with the histories and statistics of major inflations, both old and new—in the American colonies, the United States, Great Britain, and continental Europe. In 1936-39, as a statistician with the WPA National Research Project on Reemployment Opportunities and Recent Changes in Industrial Techniques, I was initiated into the mysteries of productivity measurement and learned about problems and data relating to employment and unemployment. I continued work in these areas at the National Bureau of Economic Research and the U.S. Bureau of Labor Statistics in 1939-43, until my entry into military service. In the course of my further graduate studies at Columbia in 1939-41, I benefited from association with Professors James W. Angell, Milton Friedman, Carter Goodrich, Frederick C. Mills, and Leo Wolman. As a member of the senior economic staff of the Council of Economic Advisers, for which position I was recruited by Dr. Arthur F. Burns, I participated in the preparation of eight *Economic Reports of the President,* daily pondered the optimal implementation of the Delphic declaration of policy (Section 2) of the Employment Act of 1946, and witnessed the emerging phenomenon of coexisting high rates of unemployment and price advance.

In the interval between the last essay (1966) and the first (1980) in this new volume, the original title of 1969 has freshened rather than staled. With the passage of the Humphrey-Hawkins Act of 1978, which extensively revised the Employment Act of 1946, inflation became an explicit concern of federal economic policy, coordinate with employment. Furthermore, the 1980 elections convinced politicians that the general public, after enduring a decade and a half of the New Ordeal, really perceived an "issue" in chronic price rise with chronic joblessness and hungered for a credible promise of corrective action.

Considered together, the ten essays that follow represent a "time core," or chronological sampling, of my views on the inflation-unemployment syndrome of 1965-80. They reflect an early and continuing eagerness to arrest or cure the disease while it was easier to do so and while many prominent economists remained calmly indifferent, routinely optimistic, or disdainfully aloof. The essays repeatedly address the problems of designing (1) appropriate statistics for the benign administration of wage-price guidelines with company self-monitoring; and (2) appropriate auxiliary measures for mitigating the unemployment side-effects of a necessary resort to monetary leeches and fiscal tourniquets—the crude remedies that are universally prescribed for draining a systemic inflationary fever.

The auxiliary measures that are sketched in several essays would provide incentives for individuals to abandon inflationary behavior voluntarily. In particular, they would offer protection via tax credits or low-interest bonds redeemable at public convenience of the real earnings of wage and salary workers who accept pay rises no greater than the projected near-term rate of gain in national productivity (or zero rises if this rate is negative). The same principle of protection could be adapted to personal savings and to the profits of price-restraining firms. In short, I believe that it is possible to design, and that it would be foolhardy to reject out of hand, "bridging" programs for encouragement of quick and substantial (1) restraint of unit labor cost and (2) increase in the ratio of non-inflaters to witting or unwitting inflation-mongers. It is not necessary for a society to court inadvertent death by unemployment in the shorter run through zealous and exclusive concentration on the standard remedies for avoidance of death by inflation in the longer run.

The essays that make up this volume should, like those included in the first edition, appeal on different levels to a wide spectrum of readers. Two, Nos. 3 and 6, were prepared in response to invitations from the Joint Economic Committee of the U.S. Congress, which I served as a member of its advisory panel in 1967-72; and two others, Nos. 4 and 9, were reprinted by this Committee. The *Congressional Record* also reprinted two—Nos. 4 and 5. In the new political setting, more readers are likely to take seriously the proposal of incentives for noninflationary pay behavior if it is tendered as part of a "supply-side tax package" than as a variant "incomes policy."

I am grateful to Dr. E. Earl Wright, Director of the W.E. Upjohn Institute, for his encouragement in the preparation of this book.

Irving H. Siegel

Bethesda, Maryland
December 1980

Contents

Foreword v

Preface vii

1 Looking Backward and Forward (1980) 1

2 On Statistics and Policy for Wage-Price Monitoring (1979) 33

3 Price Reduction Via Productivity Supergains: Principles, Prospects, and Programs (1972) 45

4 Productivity Statistics for a Third-Generation Wage-Price Monitoring Program (1972) 63

5 Wage-Price-Productivity Statistics: Old Gaps and New Needs (1968) 79

6 The Kerner Commission Report and Economic Policy (1968) 105

7 Fuller Employment With Uptrending Prices (1968:3) 135

8 On Manpower, Forecasting, and Public-Private Roles: Three Evolving Concepts (1967) 157

9 Guidelines for the Perplexed (1967) 177

10 Productivity Measures and Forecasts for Employment and Stabilization Policy (1966) 199

1980

1
Looking Backward and Forward

Orientation

This essay, which briefly surveys the nation's recent economic performance and the variety of informed opinion concerning needed corrective policy, is intended particularly as background reading for the nine essays that follow it. All of the nine have been published previously. Indeed, four of them comprised the slimmer 1969 edition of this book. The original title of 1969 has been retained for this new enlarged edition because it has become even more apt with the passage of time.

In the interval between the two editions, politicians, policymakers, and professional economists in general have come to recognize the durability of a phenomenon that they had been inclined to regard as transient: the coexistence of high rates of unemployment and of wage-price increase. Officeholders learned in the 1976 and 1980 election campaigns that the waggish "misery" or "discomfort" index, which merely summed together the unemployment and inflation rates, could change from a toy to a dangerous weapon in the hands of officeseekers.[1] Zealous economic factions—monetarists, rational expectationists, supply-siders, and post-Keynesians—have emerged to challenge and mock the "neoclassical synthesis," the paradigm that reigned supreme in macroeconomic textbooks since the end of World War II yet failed

> to suggest how the goals of full employment and price stability could be achieved conjointly, thus avoiding the need to make a Phillipsian choice between the two—or even to explain how recession and inflation could occur simultaneously, as they did throughout the 1970s.[2]

The Phillips curve itself started as a simple statement of trade-off between unemployment and inflation, but it has had to undergo extensive reformulation for continuing serviceability as a tool of analysis and econometric estimation.[3] In 1978, the Employment Act of 1946 (P.L. 79-304), which expressed a federal resolve "to promote maximum employment, production, and purchasing power," was at last revised to include the additional explicit resolve of promoting "reasonable price stability."

---

[1] The "discomfort" designation is often attributed to A.M. Okun. Candidate Carter used the adjective "misery" in taunting incumbent Ford in 1976; in 1980, incumbent Carter was, in turn, the target.

Instead of simply adding the annual percentage change in prices to the average annual rate of unemployment, some index makers have proposed (1) the introduction of weights and (2) the inclusion of the annual percentage in Gross National Product as a third component with a negative weight. See, for example, a letter to *The Economist* (London), November 29, 1980, p. 6.

[2] A.S. Eichner, "Introduction," in A.S. Eichner, ed., *A Guide to Post-Keynesian Economics*, M.E. Sharpe, White Plains, 1979, p. 10.

The attack on ruling doctrine is well described in a special issue of *The Public Interest*, 1980, entitled "The Crisis in Economic Theory," especially these four articles: J.W. Dean, "The Dissolution of the Keynesian Consensus," pp. 19-34; A.H. Meltzer, "Monetarism and the Crisis in Economics," pp. 35-45; M.H. Willes, " 'Rational Expectations' as a Counterrevolution," pp. 81-96; and Paul Davidson, "Post Keynesian Economics: Solving the Crisis in Economic Theory," pp. 151-173. Another informative paper is by Brian Kantor, "Rational Expectations and Economic Thought," *Journal of Economic Literature*, December 1979, pp. 1422-1441. It should be noted, in passing, that Keynes was too broad and complex a thinker to be characterized as a "Keynesian" in the sense in which this adjective has commonly been used since his death in 1946. On this point, see, for example, T.M. Humphrey, "Keynes on Inflation," in *1980 Annual Report, Federal Reserve Bank of Richmond*, pp. 5-16.

The remainder of this essay is organized into four sections. The first reviews the nation's experience of unemployment and inflation since the end of World War II in context with the Employment Act and the law that drastically amended it in 1978, the (Humphrey-Hawkins) Full Employment and Balanced Growth Act (P.L. 95-523). The second section examines the sources of the inflation that has persisted since the mid-1960s and that has occasioned the preparation of the two editions of this book. The third section samples the views of economic and other experts on the prospects and methods of disinflation and the restoration of wholesome growth. The concluding section comments on the need—and a way—to mitigate the unemployment side-effects of a probable major campaign to achieve disinflation.

By design, this essay is confined to literature and other public information available in 1980. Accordingly, it does

---

3. Illustrative of the writings on the evolving Phillips curve are: two papers by Milton Friedman, "The Role of Monetary Policy," *American Economic Review*, March 1968, pp. 1-17, and "Inflation and Unemployment," *Journal of Political Economy*, June 1977, pp. 457-472; E.S. Phelps, "Phillips Curves, Expectations of Inflation, and Optimal Employment Over Time," *Economica*, August 1967, pp. 254-281; G.L. Perry, "Slowing the Wage-Price Spiral," in A.M. Okun and G.L. Perry, eds., *Curing Chronic Inflation*, Brookings Institution, Washington, 1978, pp. 23-55; G.L. Perry, "Inflation in Theory and Practice," in *Brookings Papers on Economic Activity*, 1:1980, pp. 207-241; Philip Cagan, *Persistent Inflation: Historical and Policy Essays*, Columbia University Press, New York, 1979, especially Chapter 8 on "The Reduction of Inflation and the Magnitude of Unemployment," and Chapter 9 on "The Relation of Inflation to Slack Demand"; Gennifer Sussman, "A Summary and Critique of the McCracken Report," an appendix to C.E. Beigie, *Inflation Is a Social Malady*, British-North American Committee, March 1979, pp. 60-72; T.M. Humphrey, "Changing Views of the Phillips Curve," in his *Essays on Inflation*, 2d ed., Federal Reserve Bank of Richmond, 1980, pp. 62-73; and *idem*, "Some Recent Developments in Phillips Curve Analysis," *ibid.*, pp. 74-82.

not presume to predict or prejudge the final economic agenda of the new Reagan Administration. It does, however, take some cognizance of viewpoints and proposals that have acquired greater political authority as a result of the November elections.

Between—and Behind—the Acts

Although the declared purposes of the Employment Act and the Humphrey-Hawkins Act have commonly been characterized as "commitments" or "mandates," they are better described as unfulfillable "resolves" or breakable "pledges." The first pair of words have a solemn and unconditional ring already belied by initial experience in administration of the 1978 law—as well as by the long history of argumentation over the practical meaning of the 1946 law. Reality stands in no awe of congressional or executive rhetoric, and nowhere has it flouted federal fiat more plainly than in the quest for high-level employment with stable prices.

The heart of the landmark Employment Act of 1946 was a single 11-line sentence constituting a "Declaration of Policy" (Section 2), and the arms were a new Council of Economic Advisers (which would assist the president in preparation of an annual report) and a joint congressional committee (which would receive and review the report). The single sentence asserted, but with eager qualification, a "continuing policy and responsibility of the Federal government" to promote the three objectives already cited. Despite the minimal machinery and the omission of any explicit reference to stable prices, no president in office between 1946 and 1978 ever felt inhibited from taking steps to deter or counteract inflation. If authority were deemed necessary, it could always have been read into the notion of maximum "purchasing power."

The Humphrey-Hawkins Act announced quantitative unemployment and disinflation objectives and dates for substantial progress toward them. Thus, as provisional unemployment goals for 1983, it specified reduction of the jobless rate for the labor force as a whole to 4 percent and of the rate for persons 20 years old and older to 3 percent; and it also aimed for moderation of the rise in the Consumer Price Index to 3 percent by the same year. Furthermore, it contemplated achievement of still lower unemployment rates corresponding to "full employment" by some unstated later date; and it called for a "zero" price rise by 1988. But the law has a loophole: It allowed revision of the indicated schedules, and the president (and the Congress) exercised the permitted option to defer at the earliest opportunity! The 1978 commitment, then, is no firmer than the 1946 resolve; and, although jobs and prices seem to have become twin pillars of public policy, they also remain the horns of a dilemma of policy.

Historically, it is as easy to explain omission of price restraint from the 1946 charter for federal involvement in the functioning of the economy as to explain inclusion in the 1978 amendments. During World War II, formal controls masked the inflationary potential that would burst into being in the aftermath. Meanwhile, full or overfull employment was discovered to be feasible—a welcome contrast to the idleness of the 1930s, when price "reflation" was also deemed healthier than further price reduction. Before 1946, the bear and the bull were the best-known members of the popular and professional economic bestiary, and the spoor of "stagflation" was not yet suspected. Existence of the new brute was hinted in the 1950s and 1960s but did not become confirmed until the 1970s.

Funny things can—and do—happen to a bill on the way through a quorum, as anyone acquainted with our nation's legislative process is aware. S. 380, wishfully called the "Full Employment Act of 1945," lost its adjective and its principal parts in a familiar rite of passage. It was replaced by the far less ambitious Employment Act of 1946, which represented the maximum consensus attainable at the time.[4] This law has often since been miscalled the "Full Employment Act of 1946"—out of defiance, nostalgia, or simple ignorance. On the other hand, some of the strong supporters of S. 380 later came to recognize that its failure to become law was providential to the reputation of economists and that the Employment Act of 1946 was not a hollow mockery after all.[5]

With the unexpected maintenance of high-level employment after World War II, attention soon shifted to the problem of price moderation in the decontrolled economy. How many of the unhappy warriors who would not forgive or forget the Capitol crime against S. 380 have remembered that President Truman called the Congress into special session in November 1947 to consider a 10-point program for dealing sternly with the post-control price explosion? Truman's phrase, "do-nothing Congress," still lingers in the ear; but who recalls that the plausibility of this bit of campaign hyperbole rested in part on the failure of a second special session to accept the president's anti-inflation proposals in June 1948?[6] Furthermore, how many of today's "liberal" admirers of Truman know that his Council of Economic Advisers was already expressing concern that collective bargaining imparted an upward bias to prices?

---

[4] The evolution of S. 380 into the Employment Act has been recounted by S.K. Bailey, *Congress Makes a Law*, Vintage Books, New York, 1964.

[5] Robert Lekachman refers in *The Age of Keynes*, Vintage Books, 1966, p. 173, to the "unwitting service to the reputation of economists" done by the Congress in rejection of the "key section" of S. 380. J.K. Galbraith adds, in *Money: Whence It Came, Where It Went*, New York, Bantam Books, 1976, p. 323: "It is doubtful if those who participated in the first drafting of S. 380 . . . would, in the light of later history, have asked for much more." Contrary to a common impression, L.H. Keyserling, who had served in the Truman Council of Economic Advisers, did not share in the "liberal" enthusiasm for S. 380 and also considers the Employment Act preferable; see his "The Council of Economic Advisers since 1946: Its Contributions and Failures," *Atlantic Economic Journal*, March 1978, pp. 17-19.

In the 1950s, the increasing inflation-proneness of the economy was concealed only temporarily by the strict wage-price controls prompted by the Korean conflict. Before the end of the first Eisenhower term and well into the second, upthrusting industrial prices caused considerable official alarm. The practice of "fiscal prudence" and the preachment of wage-price-productivity truisms had little evident effect; but, at high cost in unemployment (which could have influenced critically the outcome of the 1960 presidential election), tough monetary measures did help to rein in prices by the end of the decade. Some economists were coming to see that inflation was the head of a price coin and deflation the tail of an employment coin, so that both of these faces could show simultaneously.

The price bulge manifested in the middle Eisenhower years was negligible compared to the uptrend of 1965-80, but it provoked sharp and quick dismay—as did also the price upsurge that followed the lifting of World War II controls. The slow public responsiveness after the 1940s and 1950s need not show that the nerves improve with the aggravation of the inflationary disease. Rather, it may be another sign of the ease with which a wealthy, developed country could, at last irreversibly, turn into another volatile and frenetic *mañana* republic.

In the 1960 and 1961 *Economic Report of the President*, the last two of the Eisenhower Administration, the earlier price bulge was still remembered: The suggestion was made that the Employment Act be amended to include reasonable price stability as a fourth explicit objective. Perhaps, it is not irrelevant that two of the three members of the Council of Economic Advisers at the time had experienced the disastrous German hyperinflation of the early 1920s.

---

[6] J.G. Knapp, *Edwin G. Nourse—Economist for the People*, Danville, IL, Interstate Printers and Publishers, 1979, pp. 263-64 and 280-81.

The 1960s began with great expectations of a New Economics on a New Frontier, proceeded to inauguration of a Great Society, and ended in a New Ordeal of inflation that still rages. In the first half of the decade, unemployment was reduced dramatically with little price advance—thanks to the legacy of Eisenhower slack, to the adoption of wage-price-productivity "guideposts" and their occasional reinforcement with presidential threats, and to the bold and overcelebrated tax cut of 1964. In the second half of the decade, while the New Economics was still congratulating itself, fiscal discipline broke down; increasing involvement in Vietnam, the expansion of "uncontrollable" expenditures for social welfare, and rising private demand required some reversal of the 1964 tax cut, but a new levy could not be enacted promptly. Like the sorcerer's apprentice, the practitioners of economic activism found that it was easier to turn on the fiscal taps than to turn them off.

In the 1970s, unemployment and inflation finally became recognized by the media and political leaders as inseparable and significant "issues." Recessions engineered during the decade through monetary actions clearly destroyed jobs but failed to reduce the rate at which unit production costs were advancing. Unemployment, furthermore, was worsened by intense foreign competition on our own terrain as well as in markets abroad. Robust productivity gains could no longer be expected to diminish the labor-cost impact of unabating wage rises. A serial revolution in the price of petroleum imports, crop failures, and material shortages also contributed to the upward pressure on costs.

Two presidents felt required to try to block the tide. In August 1971, mandatory wage-price controls were suddenly and surprisingly instituted; in 1973, they were inopportunely dismantled. Another try at restraint was initiated in October 1978, the same month that the Humphrey-Hawkins Act was signed into law; but the new voluntary curbs have proved as ineffectual as their timid and flawed design foreshadowed.

In its 22 discursive pages, the Humphrey-Hawkins Act of 1978 seeks "to strengthen and supplement the purposes and policies of the Employment Act of 1946." Its Section 102 lengthens the 11-line sentence constituting Section 2 of the 1946 law into a 17-line sentence plus 9 largely redundant explanatory paragraphs. The extended sentence upgrades the original employment and production objectives from "maximum" to "full," translates the ambiguous goal of "maximum purchasing power" into "increased real income," and finally adds the goal of "reasonable price stability." It grandly asserts still other economic goals of the heart's desire: "balanced growth, a balanced federal budget, adequate productivity growth, proper attention to national priorities," and "achievement of an improved trade balance through increased exports and improvement in . . . international competitiveness."

Although the rest of the Humphrey-Hawkins Act offers hints as to priorities and preferences as to procedures, any conscientious administrator could distill only equivocal and incomplete guidance therefrom. The trouble is that the many stated objectives have long proved difficult to attain, singly as well as in combination, in the refractory world in which we are obliged to live. In such a world, one might be tempted to dismiss the 1978 Act as a mere manifesto, a "Son of S. 380," a hodgepodge of compromise. Taken seriously, the Act represents no more of a mandate and no less of a resolve than its 1946 predecessor.[7] Willy-nilly, implementation would have to proceed selectively, judiciously, but with eyes dutifully fixed on all gauges; and different good-faith mixes of emphasis are conceivable and inevitable. A plausible case could be made, for example, for heavy reliance on experience gained in administration of the Employment Act—for accent, accordingly, on attainment of the "best" practicable combination of near-term jobless and inflation rates without prejudice to achievement of more distant target rates. Alternatively, an earnest administrator could start with the view held by many legislators over the years—that the Employment Act had "failed" because joblessness has persisted at intolerable rates, especially for certain visible categories in the labor force. Accordingly, emphasis would be placed on "structural" measures, as outlined in Title II of the 1978 law, for training and placement of disadvantaged minorities, youths, and other potential or actual members of the hard-core unemployed, even at the risk, perhaps, of perceptibly enlarging a few successive federal budgetary deficits.

The Carter Council of Economic Advisers and the surviving primary cosponsor of the 1978 law have disagreed sharply on the strategy of implementation, taking, roughly, the two opposing positions just described. The divergence is especially striking since the Council actively assisted in the framing of the law. In the 1979 and 1980 *Economic Report of the President,* the law was interpreted as a resolve to concentrate on both unemployment and inflation while cognizance is taken of other stated economic desiderata.

---

7. The chairman of the National Commission for Manpower Policy, Eli Ginzberg, refers in a paper published in 1979 to the "great many compromises" required by the Humphrey-Hawkins Act "in the final effort to obtain passage" (Clark Kerr and J.M. Rosow, eds., *Work in America: The Decade Ahead,* New York, Van Nostrand Reinhold, p. 84). In another reference to the same Act (p. 261), a prominent labor journalist, A.H. Raskin, speaks of "this belated effort to make real the commitment so artfully fudged in the Employment Act of 1946"—"the right to a job for everyone willing and able to work."

From this view, the practical meaning of the law is that it explicitly adds a price dimension to Employment Act goals, requires the design and discussion of future numerical paths, and properly brings the Federal Reserve into the game. As soon as Section 304 of the law permitted, the president deferred achievement of the original 1983 target unemployment rates to 1985 and of the original 1983 target rate for inflation to 1988[8]—by which time the Consumer Price Index had originally been scripted to be level. Although no new later date was given for this leveling, the event has obviously been postponed to the 1990s.

The surviving principal cosponsor of the 1978 law did not have to wait for the revision of dates in the 1980 *Report* to claim 11 "violations."[9] He found a basis for his charges in the contents of the 1979 *Report* and a *Budget Message* and in the actions of the pertinent congressional committees. According to his interpretation, the reduction of unemployment has a unique near-term priority that cannot be compromised by any immediate concern for inflationary "trade-off" and that must be supported by structural measures without regard to budgetary consequences. The scenario calls for full production and full employment first, with subsequent price stability and budget balance thereby rendered more achievable. A later statement by the same congressman ignores the 1980 timetable revisions but renews charges of wholesale violation of the law and insists on the need for a budget that is "highly stimulative rather than restrictive."[10] A still later pre-election rebuke of the Carter Administration for failure to implement the law as a blueprint for full employment was planned but not carried out; it was recognized to have much less chance of changing the president's position than of changing the minds of some voters.[11]

---

[8] *Economic Report of the President*, January 1980, pp. 9-10, 90-97. In *The 1980 Joint Economic Report*, Senate Report No. 96-618, 1980, p. 75, the Joint Economic Committee remarked: "While the necessity of revising these goals is certainly unfortunate, it is equally necessary to preserve the validity of the Humphrey-Hawkins process by making the timetable more realistic, particularly in light of long-term economic problems for which there are no easy short-term solutions."

[9] "Optimum Growth, Price Stability and Full Employment," an undated statement issued "from the office of Congressman Gus Hawkins."

The incoming chairman of the Joint Economic Committee, a veteran congressman who fared better than his party in November, made a post-election statement reaffirming jobs and prices as the twin pillars, rather than opposing poles, of policy and asserting the dominance of both in voter judgments:

> The aim of economic policy is full employment without inflation. The Democrats have failed to achieve this aim, and that's why we were thrown out of office.[12]

Genesis of the New Ordeal

As a prelude to examination of the variety of proposed remedies, we note the rather consistent views of the experts on the etiology of the economy's inflation-unemployment disease. In November 1980, the month of critical change in national leadership, unemployment stood at about 7.5 percent of the labor force, the "core" or "underlying" rate of inflation[13] was at or above 9 percent, and a still higher prime interest rate that had not yet peaked threatened to throttle a nascent recovery. For all of its results, the "moral equivalent of war" to which the nation had been summoned earlier by President Carter could just as well have been called "oral."

---

[10] *Congressional Record*, House of Representatives, Vol. 126, No. 63, April 23, 1980. The same general position is taken by Congressman P.J. Mitchell in *The 1980 Joint Economic Report*, pp. 106-10.

[11] *Washington Post*, September 27, 1980.

[12] *Washington Post*, November 14, 1980.

[13] The "core" rate, referring to price increases attributable to increases in trend costs of labor and other inputs to production, is distinguished from the contributions of external "shocks" and excess or deficient "demand." See, for example, Otto Eckstein and Robin Siegel, "More on Core Inflation," *Data Resources U.S. Review*, June 1979, pp. 1.19-1.24; and *The 1980 Joint Economic Report*, pp. 34-37.

Authoritative economists of all persuasions tend to agree that the nation's economic health began to deteriorate seriously in the mid-1960s. The patient soon lapsed into an "age of the second derivative;"[14] hope of stabilization of the price level was lost, and mere stabilization of the rate of price increase came to be regarded as a "cure." Errors of neglect, diagnosis, and treatment were many; but there is also ample evidence of the poverty and primitiveness of the healing arts, with doctors not knowing what to do as well as unable to agree. Here is a retrospective comment offered early in 1980 by a Nixon economic adviser:

> Much of our failure to control inflation over the past fifteen years can be laid to a lag in perceptions. Inflation first became serious in 1965, but we did not realize how dangerous it was and so failed to adopt strong enough measures to restrain it. As people caught on to the fact that the action was inadequate, they came to expect prices to go even higher. These expectations helped fulfill the prophecy. A self-reinforcing process began that has made inflation more fearsome and difficult to bring down . . . .[15]

---

[14] Inflation has accustomed economists, and taught the general public, to shift attention from changes in price (and wage) levels to changes in the rates of increase. See the remarks by Herbert Stein, "Achieving Credibility," in William Fellner, Project Director, *Contemporary Economic Problems*, Washington, American Enterprise Institute for Public Policy Research, 1980, p. 46; and by M.N. Baily, in a comment on the first Perry paper cited in footnote 3 (p. 126).

[15] Herbert Stein, "The Failure of Carter's Anti-Inflation Policy," *Fortune*, March 24, 1980, p. 50.

A statement offered at about the same time to a congressional committee by the only chairman of the Council of Economic Advisers who has also headed the Federal Reserve System assigns heavy responsibility to the federal government for the "present virulent inflation." He cites the government's bias toward stimulus, its interference with market forces, and its "needlessly expensive ways" of pursuing worthwhile improvements in the quality of living. Concerning the first of these, he said:

> Undue stimulus through fiscal and monetary policy tends to generate inflationary pressures by causing the aggregate demand for goods and services to rise above the level that can be supplied at existing prices. This is how the current inflation was precipitated in the fatal year 1965, when our government sought simultaneously to fight a war in Vietnam and to launch the Great Society at home while reducing tax rates instead of raising them.[16]

He recalled the "unprecedented effort" of the New Economics "to accelerate the growth of an already expanding economy by a massive cut in business and personal income taxes." The gambit "was initially counted as a brilliant success":

> But as our economy was pressed to its limits by expansionist policies, it became highly inflation-prone; and the rest is history.[17]

A prominent "liberal" economist, from the vantage point of 1975, saw an ironic parallel in the 1968 *Economic Report*

---

16. A.F. Burns, *The Perils of Inflation*, Reprint No. 110, Washington, American Enterprise Institute for Public Policy Research, March 1980, pp. 5-6.

17. *Ibid.*, p. 4. Additional pertinent observations by A.F. Burns are scattered through various papers included in his *Reflections of an Economic Policy Maker, Speeches and Congressional Statements: 1969-1978*, Washington, American Enterprise Institute for Public Policy Research, 1978.

of the President and the State of the Union message sent by Coolidge to the Congress in December 1928; both documents exuded satisfaction in discovery of the keys to prosperity. He discusses "four serious flaws" of the New Economics that are "now wonderfully clear"—the fallibility of forecasting as a basis for action in advance of need, the inadequacy of machinery for dealing with excessive market power of corporations and unions, the undependability of fiscal policy for inflation control via tax increase and expenditure reduction, and a misplaced faith in monetary policy.[18]

The 1979 *Report* acknowledged that "the current inflation has been gathering momentum for over 10 years," attributing the acceleration to the addition of Vietnam pressures to "an economy already approaching high employment." It noted the role of stimulative fiscal and monetary policies in setting the scene for restrictive actions that bring recession. But the purgative power of recession, far from restoring prices to an earlier level, may be overwhelmed by the power of pro-inflationary behaviors encouraged by prior inflationary experience:

> Once under way, a high rate of inflation generates responses and adaptations by individuals and institutions that perpetuate the wage-price spiral, even in periods of economic slack. Expectations develop that wages and prices will continue to rise at a rapid rate. . . . The formal and informal adaptations to a long-standing inflation exert a powerful force tending to sustain inflation even after the originating causes have disappeared.[19]

In June 1977, the Organization for Economic Cooperation and Development published *Towards Full Employment and*

---

[18] Galbraith, *op. cit.*, pp. 326 ff.

[19] *Economic Report of the President*, January 1979, p. 55.

Price Stability, the report of a "group of independent experts" headed by a former chairman of the Council of Economic Advisers.[20] The introduction to the report observes that "disquietingly high" rates of unemployment and inflation have followed the unprecedented growth that the Western nations enjoyed in the quarter century after World War II. The title of the first chapter asks "what went wrong," and the first sentence proceeds to answer:

> Going back to the 1960s, in the United States, failure adequately to finance the war in Vietnam and major new social programmes through higher taxes led to increasing excess demand, despite monetary restraint.

The chapter continues with a doleful synopsis of events and actions in the United States and Europe up to the fragile recovery of mid-1975. It concludes that the inflation of the 1960s originated in labor markets while the inflation of the early 1970s originated in product markets (especially for petroleum and various crops); that the combination of "policy errors" (fiscal and monetary excesses) and supply "shocks" has built up stubborn inflationary expectations and hampered the growth of output and employment.

In an article published in 1980, a Kennedy economic adviser made some observations that seem appropriate not only for concluding this section but also for introducing the next. He suggested "two interpretations of U.S. inflationary history since 1965" that lead in different policy directions:

> One blames mistaken demand-management policies—they aimed at overfull employment, accommodated too readily existing inflation and inflationary shocks, intervened too promptly and

---

[20] The so-called "McCracken Report," to which reference was made in a work cited in footnote 3.

> energetically to arrest recessions and speed recoveries. According to this thesis, correct policies can bring price stability plus realistically full employment.
>
> The other interpretation depends on the view that the price- and wage-setting institutions of the economy have an inflationary bias. Consequently, demand management cannot stabilize the price trend without chronic sacrifice of output and employment unless it is assisted, occasionally or permanently, by direct incomes policies of some kind. According to this second thesis, there is little hope that monetary and fiscal disinflation alone will cure the current stagflation.[21]

While conceding "important elements of truth" in the first interpretation of developments since 1965, he finds it "very difficult to reject the hypothesis of structural inflationary bias."[22]

"Redeem the Dream"

The threat posed by unchecked inflation to the efficiency of our economy and to the viability of our political system and society has stimulated considerable thought and writing on remedies. The prescribed regimens for draining the inflationary fever vary in emphasis, details, and feasibility; in time requirements; in the kind, extent, and socioeconomic distribution of the sacrifices still demanded and in their prospects of success. As might be expected, some plans solve by assumption various subproblems that other plans consider to be critical. It is also true that, in general, and for lack of knowledge rather than lack of concern, the goal of full employment is temporarily subordinated or ignored in belief that disinflation is the prerequisite to the possible attainment. Explicitly or implicitly, furthermore, the Humphrey-Hawkins interpretation of the paramountcy of the employment goal, even in current circumstances, is rejected or unaddressed. On the other hand, proposals for disinflation tend to minimize or overlook the possible need to deal with concomitant increases in the incidence and severity of unemployment. A sampling of the views expressed in the very recent literature follows.

---

[21] James Tobin, "Stabilization Policy Ten Years After," *Brookings Papers on Economic Policy*, 1:1980, p. 64.

[22] *Ibid.*, p. 65.

In a 1980 essay, the Nixon economic adviser cited in the preceding section reviewed four strategies and expressed his strong preference for the fourth, which he calls "committed gradualism." The other three involve: improbable and risky "shock treatment," an attempt to enforce zero inflation or something like it by sudden and drastic reduction of the growth rate of the money supply or of nominal (i.e., current-dollar) Gross National Product; restoration of some sort of linkage of the money supply to gold; and adoption of a constitutional amendment imposing restraints on fiscal and monetary management. The one-time Nixon adviser observes that, in our country, "gradualism" (an intent to disinflate over a period of uncertain duration in which unemployment would remain a bit above the "natural rate") has "lost credibility" only because it has not been pursued "with the necessary persistence." The trick is to substitute "committed gradualism"—a five-year program of determined fiscal and monetary actions, undertaken with strong presidential leadership, bipartisan congressional support, and cooperation of the Federal Reserve, that could, if carried out without digression or dilution, lead to an annual rate of price increase that is below 2 percent and to an annual rate of increase in the nominal Gross National Product that is, say, 4 percent. Changes would be required in budgetary procedures, but the program would eschew any explicit effort to restrain prices or wages or to meet a predesignated unemployment target rate. The former Nixon aide concedes that the opportunities for abandonment of "commitment" and for reversion to "short-run politics as usual" cannot be ruled out.[23]

In the same 1980 testimony that was cited in the preceding section, a former Federal Reserve chairman likewise expresses impatience with the familiar "gradualism," which calls for "mild measures over a period of five to ten years" but is vulnerable to "premature suspension or abandonment in practice." For "real headway," it is "essential to rout inflationary psychology," toward which end he proposes four kinds of action. The first is to revise the budget process so that Congress takes more responsibility for the legislation of deficits. (It should now consider cutting federal expenditures, especially by weakening the role of "indexing" in Social Security and other entitlements.) The second is to attenuate the cost-increasing effects of regulation. (He refers to the Davis-Bacon Act and laws concerning environment, health, and safety.) The third is congressional endorsement, by concurrent resolution, of Federal Reserve efforts to combat inflation by monetary means. The fourth is reduction of business taxes over a five- to seven-year period (small in the first two) to stimulate capital expansion and productivity growth.[24]

Kindred proposals were made in a paper issued by a distinguished Committee to Fight Inflation in June 1980. They include a curb on deficit-proneness of the Congress, support of the Federal Reserve's counterinflationary disposition, inhibition of government tendencies to raise prices by interference with the competitive process and by subjection of industry to excessive or overzealous regulation, tax relief for business, other measures to raise productivity (e.g., increase in outlays for research and development and establishment of intracompany productivity councils), and encouragement of domestic energy production and conservation by rapid decontrol of oil prices and addition of consumption taxes.[25]

---

[23] Stein, "Achieving Credibility," *loc. cit.*, pp. 68-73.

[24] Burns, *The Perils of Inflation*, pp. 9-10.

The same Committee to Fight Inflation was encouraged by the Reagan election to issue another policy statement in December 1980.[26] In view of "significant changes . . . in the political and social environment," it proposed a nine-point program that contemplated:

1. Reduction of projected federal expenditures for fiscal year 1981 (including off-budget outlays) by at least 2 percent.

2. Stimulation of "productivity-enhancing" capital investment through reduction of business taxes for calendar year 1981 and through additional tax and expenditure cuts for fiscal year 1982.

3. Requirement of budget balance beginning with fiscal year 1983 unless a deficit is authorized by a majority in each house of Congress.

4. Establishment of a commission to explore ways to reduce the cost increase of entitlement programs.

5. Support of monetary policies that would constrain growth of the money supply over the next three or four years to rates "consistent with a stable consumer price level."

6. Adoption of youth differential in the minimum wage and rescission or amendment of the Davis-Bacon Act.

---

[25] *A Policy Statement,* Committee to Fight Inflation, Washington, June 23, 1980. (Available from American Enterprise Institute for Public Policy Research.)

[26] *Second Policy Statement,* Committee to Fight Inflation, Washington, December 24, 1980. (Also available from American Enterprise Institute.)

7. Revision of environmental, health, and safety regulations to ensure achievement of "basic national objectives . . . at minimum feasible cost."

8. Promotion of labor-management cooperation at the company level on behalf of productivity improvement.

9. Early decontrol of prices of oil and natural gas in the interest of increasing domestic energy production.

A prescription offered in 1980 by a venerable Nobel economist residing in Britain unintentionally illuminates two of the dangerous social challenges that would confront nations desirous of quickly descending from an inflationary orbit to the preferred ground of stable prices. One major challenge would arise from intense unemployment during an indefinitely "short" period of, say, a half year. The second involves exacerbation of intergenerational conflict, not only over the distribution of burdens and benefits but also over the tolerable length of the adjustment period. The renowned economist favors drastic monetary and fiscal measures to halt inflation in its tracks. He opposes gradualism as ineffectual, especially in the presence of strong unions. At least for Britain, he regards an unemployment rate of 20 percent for six months as politically more feasible than a rate of 10 percent extending over three years. He would not heed complaints about high interest rates and would welcome bankruptcies that weed out weak managements and inefficient firms. He is against government intervention to help channel investment funds into ailing basic industries, such as automobiles and steel. Cautious about the claim of "supply-side" economics that a large marginal tax cut would induce substantial revenue increase, he is "afraid it may lead to large budget deficits and more inflation." [27]

---

[27] From interviews with Friedrich von Hayek reported in *Business Week*, December 15, 1980, p. 110, and *Wall Street Journal*, December 16, 1980.

A controversial line of attack on "rational expectations" of continuing brisk inflation rates acquired prominence during the 1980 presidential campaign. The centerpiece of this program would be a three-year series of substantial reductions in federal tax rates. These cuts would be accompanied by sharp curtailment of nondefense expenditures, encouragement of business outlays to increase capital investment and revive productivity, and alleviation of the burden of regulation on industry. The scenario also envisages a congenial monetary policy. The program is supposed to reduce the interest rates demanded by lenders and to raise dramatically the propensity to save. Many economists fear that attempts to carry out the program will actually aggravate the inflation. In any case, a transition period of dislocation and unemployment cannot be skipped before "normalcy" is restored.[28]

The program just described is rooted in "supply-side" economics, which has an appealing optimistic cast. Thus, even before the election month in 1980, the majority and minority members of the Joint Economic Committee were able to issue a unified annual report emphasizing "supply-side" measures rather than continuing efforts at demand management. They envisaged a coordinated attack on inflation and unemployment by adoption of a pro-growth package of "consistent and mutually reinforcing" policies. Thus, inflation would be fought by gradual and sustained slowdown in the expansion of the money supply and by gradual reduction of the federal share of the Gross National

---

28. "Reagan's Top Problem: Braking Inflation Expectations," *Business Week*, December 1, 1980, pp. 104-10.

It appears from a new Louis Harris poll that "a clear 55-to-41 percent majority of Americans opposes any cut in the federal income tax"—"despite the high priority that the incoming administration of Ronald Reagan has given to a 10 percent federal tax cut." The public's reluctance reflects belief that "such a cut would be inflationary." On the other hand, the same poll shows a 63-to-29 percent majority in favor of tax incentives for business investment. (Reported in *Washington Post*, December 1, 1980.)

Product. General unemployment would be fought by stimulation of economic growth through tax reductions that offer incentives to invest, save, work, and produce. Structural unemployment would be fought by realistic on-the-job training in the private sector.[29]

In May 1980, a tax expert who is a strong advocate of "supply-side" economics told the Joint Economic Committee that incentives could be used skillfully to combat both unemployment and inflation—as the Committee had already decided in its review of the President's *Economic Report.* He would shift the focus of attention in policy from aggregates to the marginal decisions of individuals, households, and firms in response to changes in relative prices. More specifically, he denied the validity of the Phillips curve and the Keynesian multiplier as policy tools and counseled tight money and significant tax cuts to induce behavioral changes in behalf of greater price stability and fuller employment.[30]

Testifying on a presidential anti-inflation message in March 1980, the current Federal Reserve chairman not only showed disfavor of overreliance on monetary *macho* but also balked at the idea of early tax cuts, even for the stimulation of business investment. The times required a "coordinated" credible approach to inflation control that included fiscal restraint (preferably, an attempt to balance the 1981 budget) and energy policy as well as a tight rein on the money supply.[31]

---

[29] Based on summary remarks by Representative C.J. Brown, *The 1980 Joint Economic Report,* p. 5.

[30] See testimony of N.B. Ture at a *Hearing Before the Joint Economic Committee on Forecasting the Supply Side of the Economy,* May 21, 1980, pp. 61-74.

[31] P.A. Volcker, in *Hearings Before the Joint Economic Committee on the President's New Anti-inflation Program,* March 17, 20, and 27, 1980, pp. 102 ff; and *Washington Post,* December 4, 1980.

A Wall Street economist whose pronouncements are highly respected in the investment community has, like the Federal Reserve chairman, expressed skepticism concerning the economic scenario that has strong support in the new Reagan Administration. In his judgment, the intent to cut taxes sharply while also raising defense spending sharply will keep interest rates high and fail to puncture the inflationary expectations of investors and workers. Continuing rises in energy and food prices, he observed, hold forth the prospect of continuing pro-inflationary wage advances.[32]

In October 1979, the Federal Reserve was thought to have embarked on a more extreme "monetarist" course as it shifted emphasis toward restriction of the growth of the money supply with less regard for the stability of interest rates. The stage for this shift had been set by the failure of government to achieve occasional budget balances or surpluses in recent times. The shift is also consonant with legislative requirements of 1975 (House Concurrent Resolution No. 133) and 1978 (Humphrey-Hawkins Act, Section 108) that quarterly and annual target rates of money growth be publicly declared. Attainment of the near-term targets, however, has proved difficult. Professional opinion is far from unanimous on the most relevant money aggregate, the sensitivity of output and prices to change in this aggregate, the lead times, and the preferred strategy of restraint (gradualism versus shock). Other factors also suggest that a clearcut test of the efficacy of "monetarism" is not at hand—the Federal Reserve's position as stated above, its conflicting requirements to manage the money supply and to accommodate the Treasury in deficit-financing, popular and political concern for business solvency and jobs, and the unhappy experience of Britain in its current wrestling with "slumpflation." [33]

---

[32] Henry Kaufman, in *Washington Post*, December 10, 1980.

The best-known advocate of monetary monism—the 1976 Nobel laureate in economics—has stated his credo on "the cure for inflation" in a chapter of this title in a new popular book.[34] He asserts "five simple truths" by way of conclusion: that "inflation is a monetary phenomenon arising from a more rapid increase in the quantity of money than in output"; that government essentially controls the money supply; that the "only cure for inflation" is to slow the growth of this supply; that time is required for cure even as it was required for development of inflation; and that "unpleasant side effects" of the cure, such as substantial unemployment, are "unavoidable." A choice between unemployment and inflation, in his view, is an "illusion": "The real option is only whether we have higher unemployment as a result of higher inflation or as a temporary side effect of curing inflation."

A leading econometrician associated with the Brookings Institution reported in a 1980 paper that his "model" attributes the recent "dismal record of the 'discomfort index' " to "exogenous shocks and a large upward shift in the inflation norm." To slow this shift, he suggests six possibilities. The first is to maintain high unemployment, and the second, which entails the first, is to keep fiscal and monetary policy "tight." The third is to announce and adhere to a "credible restrictive policy," and the fourth is to "reduce prices relative to wages without squeezing normal margins"; the intent of both would be to moderate inflationary expectations. The fifth is to offer tax incentives for wage and price moderation, and the sixth is to impose direct restraints, ranging from guidelines to strict controls. A preference is expressed for use of a workable tax-based incomes policy to complement slack-inducing macroeconomic policy.[35]

---

[33] On this paragraph, see Volcker's testimony (footnote 31); J.A. Davenport, "A Testing Time for Monetarism," *Fortune*, October 6, 1980, pp. 42-48; two articles in Burns' *Reflections*, "Money Targets and Credit Allocation," pp. 367-78, and "The Independence of the Federal Reserve System," pp. 379-85; "The Redefined Monetary Aggregates," *Federal Reserve Bulletin*, February 1980, pp. 97-114; Milton Friedman, "Inflation and Unemployment," cited in footnote 3; T.M. Humphrey, "The Persistence of Inflation," *Economic Review*, Federal Reserve Bank of Richmond, September-October 1979, pp. 3-15; and *The Economist*, November 29, 1980, pp. 11-13 and 19-23.

[34] Milton and Rose Friedman, *Free to Choose: A Personal Statement*, New York: Harcourt Brace Jovanovich, 1980, pp. 237-270.

Many other economists see a supportive role for penalty or reward systems, or even for stricter controls, in larger programs aimed at disinflation. The purpose is to alleviate the unemployment that would be induced by demand-restraining measures. Despite much discussion of incomes policies in the past decade or longer, there is little agreement on appropriate design and administration; some of the varieties appear to have been influenced in their details by emanations from the ghosts of Lewis Carroll and Rube Goldberg.[36] In 1978, the Carter Administration proposed "real-wage insurance" as an inducement to unions to honor the pay target set in the new stabilization program.[37] Despite the cogency of the concept, the scheme was poorly crafted and poorly promoted; by protecting inflaters, it would have legitimized an "underlying" inflation rate already intolerably high and requiring reversal, not reinforcement.

The writings thus far sampled seem hopeful, though guarded; but some others, even when compatible with opinions already cited above, sound less reassuring. For example, a Princeton professor told the Joint Economic Committee in May 1980 that we need "patience," a quality "sadly lacking in past economic policy." In any case, it appears that "we must face up to the fact that an inflation problem that has been building for 15 years may take just as long to be cured." He proposed a "long-term policy" of "moderate slack, coupled with whatever 'supply side' initiatives we can dream up to improve productivity growth"—the "only anti-inflation medicine that is not pure snake oil."[38]

---

[35] Perry, "Inflation in Theory and Practice," *loc. cit.*, pp. 239-41.

[36] Various tax-based incomes policies are discussed in essays by L.S. Seidman, A.P. Lerner, and L.L. Dildine and E.M. Sunley in the Brookings volume already cited, *Curing Chronic Inflation*; in Sidney Weintraub, *Keynes and the Monetarists*, New Brunswick, Rutgers University Press, 1973; and in papers by A.P. Lerner and Sidney Weintraub in J.H. Gapinski and C.E. Rockwood, eds., *Essays in Post-Keynesian Inflation*, Cambridge, Ballinger, 1979.

[37] *Economic Report of the President*, January 1979, pp.9 and 82-84.

A well-known monetary economist, contributing to a volume published in 1979, ventured that his profession "does not have much to say about how to extricate oneself without great difficulty from an inflationary process," so he would be "very happy" if his fellow-contributors "could reach a consensus, not perhaps on how to eliminate inflation completely, but at least on how we can lessen the rate of inflation." Having had "the sad experience of seeing many different efforts at combating inflation fail," he is skeptical of "any simple scheme." He does suggest, however, that an anti-inflation program has to be a "combined and determined effort carried out along many different fronts." A curb on government spending is necessary, "but this action must be combined with wage policy and with other policies which at least will provide a period of adjustment during which people can be led to change their expectations about future inflation."[39]

Writing in 1979, a distinguished economist who has been president of the American Association for the Advancement of Science as well as the American Economic Association came to "a rather pessimistic conclusion that the prospects for control of inflation are not very good." Although he thinks that "a full-employment, anti-inflation policy is feasible," he hastens to add that it demands "more knowledge than we now have, a somewhat different data base, and a very different political image and will." In particular, his policy would involve drastic federal intervention "in existing financial contracts." Since "politically we are simply not prepared to do this," he expects the inflation to continue.[40]

---

[38] A.S. Blinder, in *Hearings before the Joint Economic Committee, Congress of the United States*, May 28 and 29, 1980, p. 40.

[39] Don Patinkin, "The Inflationary Experience: Some Lessons from Israel," in *Essays in Post-Keynesian Economics*, pp. 133-34.

Finally, a post-Keynesian school of economists that seeks to replace inadequate "orthodox" theory offers an uncommon diagnosis of inflation and arrives at an uncommon proposal for remedy. According to this school, inflation arises not from excess demand or too rapid growth of the money supply but from conflict over the distribution of available income and output. Restrictive monetary and fiscal policies limit the available totals and thereby intensify the struggle for shares. An incomes policy, which is nowadays proposed as a means of mitigating the unemployment accompanying restrictive anti-inflationary measures, is seen instead by the new school as the proper fruit of a prior national consensus covering all categories of claimants. This consensus, established by a social and economic planning organ in which all interest groups are represented, "would finally permit government to pursue a maximum growth or 'full employment' policy without having to fear the inflationary consequences."[41] It is safe to surmise that this paragraph will not influence the approach taken by the new Administration and the new Congress in the quest for fuller employment with less inflation.

---

[40] K.E. Boulding, "Inflation as a Process in Human Learning," in *Essays in Post-Keynesian Economics*, especially p. 30.

[41] Eichner, "A Look Ahead," in *A Guide to Post-Keynesian Economics*, pp. 174-84. See also, in the same volume, Eileen Appelbaum, "The Labor Market," pp. 117-19.

New Era—or Error?

The dramatic shift of political power signaled by the 1980 elections provides a basis for hope of more resolute and more effective leadership against inflation. A successful early outcome should not be taken for granted, however, in view of the dreary economic history of the decades since the end of World War II; the origins, later sources, and long life of the current inflation; and the diversity of authoritative opinion regarding appropriate strategy and tactics. Furthermore, even if the struggle against inflation were eventually to succeed, any predesigned program of disinflation would most likely have to be revised extensively along the way. The original timetable, too, would probably prove overoptimistic. Accordingly, whatever the exact nature of the disinflation program that will be formulated initially by the new Administration, the remarks that follow should retain some relevance for evolving government policy. It should be recalled, for the sake of perspective, that the current fashionable revulsion against Keynesianism was preceded by a fashionable bipartisan tolerance; that the Nixon Administration adopted wage and price controls despite professions of ideological abhorrence of such intervention.

Of special interest for this book is the near certainty that a determined attack on inflation would entail a concomitant substantial rise in the general level of unemployment. Such a rise is suggested by the inevitability of a central role for monetary restraint. Furthermore, workers in particular industries, regions, and localities may be expected to experience prolonged idleness as a result of fiscal retrenchments, the unwillingness or inability of state and local governments to fill gaps in federal outlays, the limited geographic and interfirm mobility of older disemployed persons, and so forth. Although stimulative tax changes and new defense spending could favorably affect some area economies and assist some industries damaged in fierce international competition (e.g., automobiles and steel), they could hardly arrest the worldwide shift in manufacturing activity, reverse the decline of major central cities, or reduce decisively the high rates of joblessness for young persons.

Assignment of top priority to the mastery of inflation need not, of course, imply repudiation of the earlier federal resolve to promote "maximum employment." All the objectives stated in Section 2 of the Employment Act, as amended in the Humphrey-Hawkins Act, remain appropriate, whatever party is in the ascendant. While the objectives remain fixed, the weights assigned to the various desiderata are alterable in the light of changing economic conditions and perceptions. As for the specific milestones of the Humphrey-Hawkins Act, precedent for benign neglect has existed from the very beginning. Continued neglect would be much less provocative than a gratuitous alternative course that has recently been proposed: "repeal" of the Act *in toto* or, at least, of the "unrealistic" prescription of a 4 percent goal for unemployment.[42]

Only an economic flatworm would be satisfied to view the processes of inflation and disinflation simply in terms of rates of change in prices, output, and the money supply. Government leaders unfortunately have to recognize and take due account of the social and political dimensions of the two phenomena. The conduct of a serious disinflation program is bound to expose and sharpen the intergroup differences, tensions, rivalries, and conflicts that contributed to the buildup of inflation in the first place.[43] In particular, stern counterinflationary action could sufficiently aggravate unemployment to the point of threatening national cohesiveness and public order.

---

[42] Stein, "Achieving Credibility," *loc. cit.*, p. 73.

[43] For sophisticated discussions of the noneconomic aspects of inflation, see the essays in Fred Hirsch and J.H. Goldthorpe, eds., *The Political Economy of Inflation*, Cambridge: Harvard University Press, 1978.

The latent danger to social and political stability counsels the desirability of offering incentives that would shorten the disinflation process and reduce its human pain. Specifically, a disinflation package might well provide, through tax credits or low-interest bonds redeemable at public convenience, for protection of the purchasing power of the earnings of wage and salary workers who agree to forgo pay increases in excess of the prospective national rate of productivity advance. The offer of protection to such workers would have the double merit of increasing the ratio of noninflaters to witting or unwitting inflaters and of discouraging the "pre-indexation" of unit labor cost that prolongs upward pressure on prices into the future.

Four additional comments elucidate this proposal for constructive enlistment of employees in the fight against inflation:

1. The proposal is not just another member of the motley family of "incomes policies" that political leaders disenchanted with "controls" are inclined to eschew categorically. It does not require enforcement by company managements acting as gendarmes or deputies for the state. Indeed, it is consistent with the notion of economic freedom that the new Administration wishes to enlarge. By appealing to selfish interest, it seeks to motivate voluntary behavior for the larger public good.

2. As a "supply-side" instrument, the proposal promises far less ambiguous counterinflationary benefit than does, say, a preset multiyear reduction in marginal tax rates for all income earners.

3. The proposal should not be confused with the Carter concept of "real wage insurance" that it might have in-

spired. The latter was intended to protect workers getting pay increases up to 7 percent—far above the expected national rate of productivity advance. This idea could only have made the inflationary result of the annual union game of "catch-up chicken" easier to forecast; it was not aimed at ending the game.

4. The same criterion of purchasing-power protection is appropriate for workers in both the private and public sectors. (In earlier years of the current inflation, the federal government missed an opportunity, as the nation's largest and most concerned employer, to set an example for others to follow by restricting its pay increases to the national rate of productivity gain. Adjustment of federal pay instead for so-called "comparability" with the private sector was never technically sound and has served as a mechanism for propagation of "wage inflation.")

Finally, the notion just elaborated for encouragement of voluntary wage restraint is also adaptable to other disinflationary programs—for example, the stimulation of net new personal saving. Thus, instead of hoping that a sizable multiyear income tax cut would significantly increase net savings, the federal government could provide a direct incentive in the form of a tax credit.

In the course of preparation of this introductory chapter to a new edition of a work that began to take shape in the very dawn of the New Ordeal, a passage in a poem by the eminent Victorian, Matthew Arnold, often came to mind:

> We do not what we ought;
> What we ought not, we do;
> And lean upon the thought
> That Chance will bring us through.

May our nation's quest for fuller employment with less inflation during the next decade and a half warrant a more positive retrospective assessment.

1979

2

On Statistics and Policy for Wage-Price Monitoring

Another Try

As I did at two previous meetings held while guideline programs were in effect (Nixon's in 1972 and Johnson's in 1968), I offer some observations that I consider pertinent to the design of yet another—a future—program. I was convinced on those past occasions that strong inflationary pressures would persist and would, regrettably, inspire new ventures in nonpermanent wage-price control. My remarks here are addressed either to a new installment in a serial sally against today's robust and elusive inflationary dragon; or, if this dragon is somehow overcome, to the hunt of a successor dragon that will need to be checked, captured, or killed. I present my observations under three heads: the efficacy of guidelines, their self-enforceability, and statistical needs for administration. The opinions I express certainly cannot be attributed to any organization with which I have been associated; they derive from a professional interest that began, however, with my service on the senior staff of the U.S. Council of Economic Advisers in 1953-60.

Reprinted with minor changes from the 1979 Proceedings of the Business and Economic Statistics Section of the American Statistical Association.

Efficacy of Guidelines

Despite a common lay and professional belief, guidelines do not represent a sort of exceptional failure among government programs. Granted that the record of prices since inauguration of the present guideline effort in October 1978 is dismal; that distortions have been introduced; that inequities have been exacerbated; that the groundwork for other future (even pro-inflationary) troubles has been laid. But how successful have other ambitious government initiatives turned out in comparison to proclaimed official objectives and engendered public expectations? Look around almost anywhere—nuclear power, the Alaska pipeline, the Department of Energy, defense, social security, Medicare, welfare, CETA, reintegration of Vietnam veterans, public housing, administration of justice, antitrust, international trade—and, if you know enough and care enough, you will find ample reason for frustration and dismay.

The special difficulty presented by failure in the wage-price area is that intense psychic disequilibrium ensues. Once the inflationary menace has become even more real than television, as personal and immediate as gasoline lines, the failure to check or eliminate it leads to keen and widespread apprehension. People sense that the minor unequal sacrifices already exacted will be followed by more serious levies of unknown cost, incidence, duration, and outcome. Surely, not every worker looks forward, after a season of travail, to the comprehensive and mandatory controls that AFL-CIO again proposes in the July 1979 *American Federationist* as alternatives to the present flaccid "voluntary" guidelines. Surely, not every white-collar employee of *Business Week* is cheered by the editorial call of August 13, 1979 for "euthanasia" of the current program without any indication as to how else the nation might fare any better. These employees have surely read in their own journal that the conventional unwisdom, already driven beyond wit's end, knows only to prescribe "monetary hemlock" and the creation of "unemployment in the public interest." So why should the large public that retains reliance on jobs and credit for its well-being not suffer "malaise"?

Disappointing experience and fear for the future could easily lead to the mistaken conclusion that guidelines have "no effect" at all. They do, indeed, have effects, and not only adverse side effects and aftereffects. Why should the market-oriented gambits of government be judged inherently inconsequential when those of a cartel, a monopoly, or a bellwether oligopolist are automatically believed to be effective? I think that the poor opinion of guideline efficacy is an overreaction to the failure to achieve as much as promised or expected.

What can be said of a constructive nature in behalf of guidelines? Even when backed by mere publicity, occasional jawboning, and the threat of sanctions, they obviously influence private decisions and bargains respecting wages and prices within a discretionary range. Their net effect is a tilt toward moderation, especially since contracts typically have some duration and since initial outright noncompliance is relatively rare. I am well aware that the tilt is less than would be desired; that announced ceilings tend to become floors also; that norms lose dispersion; that targets tend to accommodate, rather than seriously to counteract, inflationary pressures. Nevertheless, I believe that, in the absence of guidelines, speculative and disorderly surges and subsequent retreats would ratchet up wages and prices faster than the rates actually experienced. Even the accommodative pro-inflationary ceilings that are set under guidelines have to be breached "legally" and in the sight of government administrators and price vigilantes; and such breaching may require stewing and relatively slow journeys through a bureaucratic mill.

Common sense suggests that, once adopted, guidelines ought to be used most constructively to the limit of their meager potential—and here the role of government leadership is critical. Guidelines that are timidly conceived in the name of "realism" have a weak counterinflationary bite at best, but this is not their only frailty. The important fact to consider is that whatever restraining influence they do exert is bound to be short-lived. Sooner or later, they degrade through self-poisoning with compromises and exceptions; and then they are stabbed in the back by initial exemptions from coverage and by noncompliance emboldened by examples of defiance with impunity.

Accordingly, guidelines must be viewed as part of a larger policy package; and, just like a "freeze," they have to be viewed also as a bid for time. During the early phase of credibility when they less ambiguously tend to slow wage-price metabolism, guidelines can buy time for the rest of the package. Beyond systemic monetary and fiscal maneuvers, this package has to include fundamental attacks on the specific supply-demand imbalances that also underlie inflation. Indeed, the efficacy of guidelines might be reinforced and extended if it were clear that the government is diligently working to correct such imbalances. Accommodative guidelines cannot, by mere adoption, provide basic supply-demand correctives; they can even make the imbalances worse. Ironically, in the absence of these additional measures relating to resource supply and use, more comes to be expected of aging guidelines and more grievous seems their failure to do what they cannot do.

My preference is for government leadership, from the very start of a "fight against inflation," to respond unequivocally to its own bugle. Neither the public nor the dragon should be cajoled with catnip policies into believing that coexistence is possible or desirable, with the dragon simply to be put under house arrest as a fatted live-in pussycat. I prefer the announcement of "unrealistic"—i.e., truly counterinflationary and hard-to-achieve—wage and price goals with incentives for voluntary fulfillment; and simultaneous, or even much earlier, announcement of other determined undertakings to rectify basic supply-demand imbalances that also feed inflation. If "realistic" pro-inflationary "interim" numerical targets have to be set, they should be advertised as warnings of the dangers still faced by the nation if the incentives provided are not used for *better* counterinflationary performance and if the corrective supply-demand actions are not bold and timely enough.

Unqualified "realistic" targets that specify inflationary wage and price increases as allowable confer an economic and social respectability on a state of affairs that needs to be rendered "unrealistic." They, unfortunately, subtly change the agenda from the defeat of inflation to an exercise in fine-tuning it. I prefer that government *not* offer purchasing-power protection for wages that rise much more rapidly than productivity. I prefer the official reassertion of the "unrealistic" algebraic truth that wage increases in excess of productivity prospects raise unit labor cost and the "unrealistic" empirical truth that unit labor cost is strongly correlated with product price. Were a political Micawber having major responsibility for guideline redesign and administration to ask me what he could do for the country rather than it for him, I would suggest that he do more than read my papers; I would advise him to take what I have just said to heart and to risk becoming a political kamikaze on the job, "in the national interest."

Self-Enforceability of Guidelines

Years before the tip of TIP (tax-based income policies) became visible, I was on record as favoring wage-deferment bonds or tax offsets as incentives for workers to accept *mere* *productivity-warranted pay increases.* I did not at all view this incentive as a new "loophole," as just another "tax expenditure" that ought, in a misguided spirit of "equity," be negated by extension to farmers and others. Rather, I meant this protection of the earnings of cooperating workers to be an explicit *income transfer* from the large body of witting and unwitting inflaters. I also hoped that the purchasing-power guarantee would look like a good deal, would accordingly swell the ranks of noninflaters in short enough time, and would finally encourage unions and other institutions to join in a meaningful "social compact" of restraint.

Although I kept writing "letters to the editor" and sought through other correspondence as a private citizen to encourage consideration of my idea, the scheme for "real wage insurance" that surfaced in 1978 struck me as absurd, so I was pleased at its demise in Congress. In a letter published in *Business Week* of December 4, 1978, about a week after I was temporarily assigned by the Department of Commerce as a "detailee" to the Council on Wage and Price Stability, I wrote that "the protection of the wages of workers getting increases up to 7 percent amounts to a codification of inflation." I proposed instead that "a true anti-inflationary standard would limit protection to workers getting increases no greater than the productivity trend rate, say 2 percent." I recognized, of course, that economic colleagues and assorted political sophisticates would immediately dismiss this proposal as "unrealistic." On the other hand, I ventured that "it is also unrealistic to fight a fire by recalibrating the thermometer" or by aiming just to contain the fire "at a two-alarm level." Yes, I prefer the "unrealism" of harassing the dragon to the "realism" of accepting its recent ravage as a norm.

The concept of self-enforceability of guidelines is applicable in some degree to prices as well as wages. The discretionary range of a company might be compressed downward by the offer of some protection to the presumptive purchasing power of its after-tax earnings. The protection ought to be limited to companies showing a significantly better record of price restraint than other companies in the same industry or product line.

Savers too should be encouraged. In support of guidelines (as well as economic sense in general), more honest interest rates ought to be available to savers—higher than the increase in cost of living. If such rates cannot be paid, then some degree of purchasing-power protection should be provided through the tax system. The protection should be confined to net additional savings of a specified percentage of the income of persons earning up to a specified amount.

Statistics Needed for Guideline Administration

Whatever the shape of the next monitoring program, statistical gaps are bound to be discerned and deplored. When the Nixon guidelines were in effect, a strong need was felt for generally absent company productivity information. The current guideline effort, according to my own brief experience as a "detailee," could have benefited if, from the outset, companies had been encouraged, and had also been properly instructed, to establish price indexes and to maintain them in inspectable form for review on demand. The program could also have benefited from application of the price standards to each company division or other major component rather than to a company as a whole.

Even as experience under the Nixon program must have stimulated company interest in productivity statistics, backroom and boardroom ruminations over the revised *Wage and Price Standards* of December 1978 must have motivated companies to ponder the arts of price-index construction. After all, a company's strategy for compliance could have depended on what such an index showed. Company statisticians must already have known, or could easily have learned by test computations, that alternative allowable modes of measurement need not agree on the show of compliance or noncompliance. Accordingly, they could have guided their principles in the selection of favorable indexes.

In the event that company productivity information is required for a future monitoring program, it may be comforting to know that many circumstances have helped improve the statistical outlook. (The present program, incidentally, makes very limited call for such information.) Ubiquitous computers and "management information systems" already provide primitive productivity measures for many companies in the monthly welter of printouts. The pressures of continuing inflation and intensifying foreign competition on company survivability, autonomy, and profitability have multiplied the number of seminars offered to business officials on productivity measurement* and related topics. The growth of employment in government and in private service industries and service activities has, meanwhile, had the salutary accompaniment of breaking down past inhibitions against productivity measurement on a "subproduct" basis, which many economic statisticians conventionally demean as a form of "work measurement." (I first touched on the subproduct method in a paper of June 1944 in the *Journal of the American Statistical Association.*)

Although it is expedient to administer wage guidelines separately (even within a single agency), the two processes have to be pursued compatibly and their results have to be

---

*During my years at the Department of Commerce, I actively engaged in the presentation of lectures on the why, what, and how of such measurement. Since this paper was written, the W.E. Upjohn Institute for Employment Research has published a little book of mine on *Company Productivity: Measurement for Improvement* (1980).

examined and evaluated in a common framework. For such integration, I noted in my 1972 American Statistical Association (ASA) paper* the potentials of the Leontief input-output system, so I am pleased to see that the system has been informally utilized in the current program. On the other hand, another integrative statistical device proposed in my 1972 ASA paper (and in earlier publications) has not been applied in guideline administration—the construction of algebraically consistent and symmetric index numbers for the key macrovariables that are relevant to monitoring.

For example, we may start with a verbal identity connecting average hourly earnings to three other variables of interest in monitoring. Such earnings are expressible as the product of (a) the ratio of payroll to output value, (b) product price, and (c) output per man-hour. This expression could then be used as the template or module for constructing symmetric indexes from data for the corresponding microvariables—for translation of the initial "verbal algebra" into stricter "literal algebra." The product of (a) and (b), incidentally, is a compatible index of unit labor cost, also highly relevant to a guideline program. The system obviously makes heavy data demands, so approximations and compromises would be required in any serious attempt to convert the formulas into numbers.

Fortunately, we may do much better with a simpler approach that deals only with aggregates rather than index numbers and that does not directly involve productivity. This alternative approach, moreover, has two special merits: (a) it is well suited to advancement of the cause of self-monitoring for inflation abatement, and (b) it also facilitates coordination of wage-price and monetary policy. Ideally, each company should try to satisfy this inequality, $\Sigma c_1 q_1 \leqq \Sigma c_0 q_1$, where a q stands for output of a product and a c is its unit labor cost. The sum on the left is the payroll for the target period 1, and the sum on the right represents the output of period valued in unit labor costs of base-period 0. Since a certain amount of inflation may have to be recognized as allowable, the sum on the right could be multiplied by (1 + k). A different k is specifiable for different classes of companies, or a uniform k could be set for all the covered companies. Incidentally, if both sides of the inequality are divided by the right-hand member, it becomes clear that the criterion relates to a Paasche index of unit labor cost.

---

*See essay no. 4 in the present volume.

As I indicated in my 1972 ASA paper and earlier publications, additional inequalities may be invoked for extension of the monitoring process to value added or to total value of output or both. Thus, an inequality like $\Sigma v_1 q_1 \leqq \Sigma v_0 q_1 (1 + m)$ could be applied as a standard for net (all-factor) price; and an inequality like $\Sigma p_1 q_1 \leqq \Sigma p_0 q_1 (1 + n)$ could be set up as the criterion for total price (or price excluding profit). If desired, some relationship could be specified for k, m, and n; or all might be required to be equal (as well as positive).

Finally, the last inequality or a variant of it could be used in coordinating monetary and wage-price policy. Thus, as has often been discussed, a rule could be established that the increment of the nation's money supply in period 1 should not exceed a certain percentage of the gross national product as measured in prices of period 0.

In short, a wage-price program could get by with a minimum of statistical baggage and of a kind already familiar to cost-conscious companies. This does not mean, of course, that the required detailed unit-cost, total unit-cost, unit-profit-margin, and unit-price information for individual products already is universally available. The burden imposed by the construction of the hierarchical inequalities (by the way, these could be recast into incremental form) is relatively small, however, and should be manageable without heroics by any firm that practices cost-accounting. Quarterly (retrospective and projective) computations could be made as firms move through the target year. I think the approach affords a flexibility that ought to have wide appeal. Within the constraints of the inequalities, resource substitutions would not need to be watched from the outside; and different constants could be introduced into the inequalities for different industries. Companies would be able to navigate according to internally-generated information.

In closing, I add that the Paasche indexes implied by the algebraic expressions presented in the preceding paragraphs could be replaced by Laspeyres measures—or, better still, by averages of the two, such as Edgeworth indexes. For example, we could replace $\Sigma c_1 q_1 \leqq \Sigma c_0 q_1$ by $\Sigma c_1 q_0 \leqq \Sigma c_0 q_0$, which implies that a Laspeyres index of unit labor cost should not exceed unity. Alternatively, we could combine the two expressions to obtain $\Sigma c_1(q_0 + q_1) \leqq \Sigma c_0(q_0 + q_1)$, which implies an Edgeworth criterion. Similar substitutions could be made for the remaining inequalities shown in earlier paragraphs.

1972

3

Price Reduction Via Productivity Supergains: Principles, Prospects, and Programs

My assignment is to identify "potential areas of price reduction"—presumably, a subset of those industries characterized by better-than-average productivity gains. In addition to reporting here on a review of the recent productivity experience of numerous industries, I shall take some notice of correlative price changes. But I want to go beyond a statistical account since, even if it were rendered by a whole institute, it would still do less than full justice to the assignment. I feel required to say something also about the "theory" of productivity-warranted price cuts and about practical mechanisms for translating potentials into realities. The range of my discussion is indicated by the three nouns of the subtitle, which serve as divisional headings for the remainder of this paper.

Principles

I discuss "theory" first. Under its own name and behind such masks as "profitability," "efficiency," and

---

Reprinted from *Hearings on Price and Wage Control: An Evaluation of Current Policies, Part 2*, Joint Economic Committee, U.S. Congress, 1972.

"technological progress," productivity has long been recognized by businessmen, by economists, and by administrators of planned societies to be relevant to price policy and behavior. I briefly comment on three patterns of relationship among productivity, wages (or incomes), and unit labor (or all-factor) cost that have been imagined or prescribed on behalf of downward price flexibility.[1]

Even before I describe the three patterns, I wish to insert three caveats which themselves belong in the "theory" of productivity-warranted price reduction. First, not one of the three patterns is automatically realizable through the operation of existing markets. Second, productivity change is not, and should not be reckoned as, the only valid determinant of price change. Third, insofar as productivity performance does indeed bear on opportunities for price reduction, productivity *prospects* are far more relevant than productivity *history* over the recent or longer past.

These caveats need not long detain us. With respect to the first one, monopolistic and oligopolistic forces—including the action of unions—probably tend toward achievement of rising, rather than stable or declining, prices in the economy at large. With respect to the second caution, price changes are properly influenced by numerous circumstances in addition to productivity change and market imperfections. Among these many extra influences are capital needs, weather, custom, tastes, governmental regulations, and the intensity of foreign competition. The arithmetic of averages need not be satisfied, of course, by the behavior of each firm or industry included in a comprehensive measure. As for the third caveat, costs vary throughout the business cycle, so recent past experience regarding productivity and profits is not routinely extrapolable; and, taking a longer perspective, we should not expect a maturing, stagnating, or revitalizing firm or industry to recapitulate in the future its earlier record of productivity and cost changes. Inflation, unfortunately, seems not to care a fig for the opinion of economists and others regarding the braking power of productivity trends observed here or there in the economy over the past *x* or *y* years. Before the Kennedy-Johnson guideposts, the Eisenhower *Economic Reports* properly stressed the productivity outlook. I hope the reader bears this paragraph in mind as I try to simplify my presentation by the use of time-neutral language in my references below to productivity.

---

[1] Reference is usually made to wages (per hour or per worker) in the rest of this paper, but only for convenience and not with the intent of ruling out a comprehensive incomes policy. If all income paid to persons and property is covered by a comprehensive policy, the conventional labor productivity concept has to be replaced by another that is equally comprehensive in scope. Similarly, it would no longer do to speak of unit labor cost; the proper concept becomes all-factor cost per unit of output.

The first model envisages the distribution of all, or almost all, of the benefit of rising productivity in the form of price reduction. That is, hourly wages would *not* increase at all; but the purchasing power thereof would rise as generally falling unit labor cost is generally translated into price cuts. This pattern for, say, private-sector averages permits deviations, of course; it is compatible with the registration of price rises for individual firms or industries that are characterized by productivity decline and advancing unit labor cost in a regime of typical wage stability.

In his final book, *Competition as a Dynamic Process,* J.M. Clark recalled that this model, representing "hardly a thinkable condition," was advocated by such old stalwarts of The Brookings Institution as Moulton and Nourse. All people would benefit in their role as consumers; wages would not rise for workers, and prices would fall for nonworkers as well. "Inequalities in the diffusion," Clark observed, "would result only from the fact that products in which increased productivity has caused more than average decline in prices may play a larger part in some consumer budgets than in others."[2]

Although this model featuring vigorous price competition may not be realistic for the economy at large, innovative companies and industries do experience or anticipate substantial productivity gains and can use these gains as a partial basis for price reduction. Profit per unit could well decline, but a price cut itself may engender a compensatory gain in sales volume. Clark says:

> Sometimes the process may uncover possibilities of profitable sales expansion unanticipated by the more conservative members of the industry. This is most likely to happen when a young product is exploring new potential uses.[3]

Clark's remark can be extended to new *users,* too. It reminds me of Ford's example, which still has counterparts outside the automotive field, as we shall observe in the next section of this paper. The Model T first sold for $1,200, but later sold for as little as $295. Ford recognized a relation between price reduction and sales expansion; and he asserted that the reduction of price even served as a spur to cost-saving in design and manufacture:

> When we first reduce the price to a point where, we think, more sales will result, then we go ahead and try to meet the price. The new price will force the cost down.[4]

---

[2] J.M. Clark, *Competition as a Dynamic Process* (Washington, The Brookings Institution, 1961), pp. 79, 441.

[3] Ibid., p. 79.

[4] Quoted in Garet Garrett, *Henry Ford: The Wild Wheel* (New York, Pantheon Books, 1952), p. 108. See also pp. 12, 107, 109.

The second wage-price-productivity model reflects a newer conventional wisdom which Galbraith himself tends to mistake for reality in *The New Industrial State*. This model, mentioned in the Eisenhower *Economic Reports* and more fully elucidated in the Kennedy-Johnson *Reports*, opts for general price stability with wages rising in step with productivity. Since differential wage adjustment appears impracticable from industry to industry, unit labor cost would not remain level everywhere; so price increases required in some industries would need to be offset by price reduction in industries with better-than-average productivity gains.

This is a model that is commonly favored for our society; it is not a mirror of what actually happens. Writing more than a decade ago, Clark opined that the aim of price stability with "equitable" wage adjustments would "not prove feasible." He foresaw wage gains generally outstripping productivity gains and prices consequently trending upward:

> What we are likely to get, wages and prices being determined as they are, is a third form of diffusion, in which wages in the more dynamic industries rise as much or more than the better-than-average rate of increase of productivity in these industries, wages elsewhere follow this rate of rise as closely as they can, rising more than productivity in the less dynamic industries, average wages rise more than average productivity, raising average unit costs, and prices rise to offset this, approximately maintaining the proportionate share going to profits. The indicated result is a "creeping inflation," financed by an elastic credit system that is under pressure to furnish the monetary resources to handle the increased volume of business, on penalty of being held responsible for precipitating a recession. Fixed dollar incomes shrink in real value, real interest is less than nominal interest, and conven-

> tional depreciation reserves fail to provide funds for full physical replacement.[5]

Obviously, Clark's variant, which Sumner Slichter had visualized earlier,[6] is not a model that is amicable to price reduction. Besides, he regarded this variant as a mirror of reality. He noted the buoyant roles of unions and government in the passage cited; and, elsewhere in his book, he devoted considerable attention to company practices (such as product differentiation, "full-cost pricing," and the quest for "target returns" on investment) that also seem to limit the opportunity for price cuts.

Clark's pessimism remains warranted. Even during the present Phase II, a period of wage-price monitoring, we may encounter reports of the use of "price discipline," not for competitive price-cutting, but to enforce *rises*. Note the O. Henry twist and the complacent tone of this news item, which appeared in a prominent business publication at the beginning of 1972:

> Demand for steel has started to pick up, and the Price Commission has given its blessing to price increases for sheet steel. So this would not seem a likely time to cut prices. But U.S. Steel Corp. did just that this week, with decreases of $5 to $25 per ton on more than half its products, including pipe, bars, structurals, and most sheet products. The reason: old-fashioned industry price discipline. Inland Steel Co. had quietly begun allowing quantity discounts of $1 to $8 a ton, and U.S. Steel apparently is aiming its lower prices at these, with the

---

[5] Clark, *Competition as a Dynamic Process*, p. 80.

[6] A succinct, advanced version of S.H. Slichter's argument may be found, for example, in his paper on "Labor Costs and Prices," in *Wages, Prices, Profits, and Productivity*, American Assembly (New York, Columbia University, June 1959), pp. 167-180. In the same year (March 1959), Slichter testified before the Joint Economic Committee in the hearings on "The American Economy."

> goal of forcing competitors up to the levels approved by the Price Commission.[7]

The third model that entails price cuts is algebraically close to the second one described above, and it acquired a prominent place in Soviet thought and practice long before wage-price-productivity controversy became a commonplace of our own economic scene. Instead of aiming at general price stability with wages rising in step with productivity, this rule seeks a more moderate wage advance and, *a fortiori*, declining unit labor cost. The object is to facilitate, not only price reduction, but also a shift of factor-input composition in the direction of capital. In an originally-classified monograph that I wrote two decades ago, I stated the Soviet concept and compared it to prevailing United States opinion in this manner:

> The ultimate dependence of high real wages on high labor productivity has, of course, been recognized by Soviet leaders from the very beginning. . . . Out of the struggle against leveling tendencies and the victory of planned investment, a conscious wage policy has evolved. This policy, often stated in garbled or elliptical form in Soviet and satellite literature, amounts to the following: The rate of productivity advance should exceed (1) the rate of increase of average *real* wages, so that a sufficient surplus should accrue to the state for capital expansion, defense, and educational services; and (2) the rate of increase of average *nominal* wages, so that unit labor cost would fall and money prices of commodities could also be reduced. If planning in terms of resources were perfect, the first relationship would be achievable without difficulty. If fiscal planning were correct,

---

[7] *Business Week*, January 8, 1972, p. 26.

> the second would be realizable, too. In U.S., where government "full" employment policy would have to be implemented by indirect means (like compensatory spending), there is more excuse for error.
>
> Incidentally, it is interesting to note that proponents of economic stabilization in the U.S. have generally recommended maintenance of a *static* price level over time and the increase of wages at the *same* average rate as productivity. Since the price level would be stable, however, real and nominal wages would be almost proportional (not exactly proportional because relative prices need not remain fixed). The difference between this wage policy and that of the USSR is the difference between the productionist and consumptionist philosophies.[8]

In concluding this section, I want simply to mention that the patterns of relationship here discussed can advantageously be recast in terms of aggregates. I do believe that a criterion stated in terms of output and payrolls is easier to grasp than an equivalent statement in terms of such averages as productivity, hourly pay, and unit labor cost. When the next peacetime monitoring effort is required, a shift to aggregates should be considered.

Prospects

Turning to the available statistics, I take account below of two compilations reflecting the variety of productivity gains recorded in manufacturing in recent years. One set, showing the average annual trend rates of productivity change in 1958-1969, was promulgated by the Price Commission on

---

[8] I.H. Siegel, *Soviet Labor Productivity* (Chevy Chase, MD, Johns Hopkins Operations Research Office, May 1952), pp. 19-20. An accompanying footnote translates the discussion into algebraic form.

May 3, 1972. The other set, showing annual productivity series and corresponding price movements for 1958-1970, was obtained from the Bureau of Labor Statistics for use in the preparation of this paper. In the remainder of this section, I refrain from expressing and pursuing my usual interest in the quality of the data used and in the details of measurement.[9]

The Price Commission needs productivity rates for guiding the calculation of approximate change in a company's unit labor cost, but the language still used in the monitoring instructions could easily confuse the earnest businessman or his professional consultant.[10] The Commission's reliance on trend rates implies that they are interpretable as near-term forecasts. It does appear that, in their derivation, an effort was made to give them greater relevance to the economic prospect.[11] Nevertheless, it remains reasonable to entertain reservations concerning the equivalence of computed rates for a past decade or so and unknown preferred rates for the year or two immediately ahead.

If the reservations are themselves unwarranted, the Commission's productivity figures do disclose industries that might merit further examination for price-cutting potentials. The weighted average of the hundreds of published annual trend rates is between 3 and 4 percent.[12] Taking 5 percent or more as the criterion of better-than-average productivity gain, we may isolate many candidates for closer study. Since wage adjustments tend to be more uniform than productivity change from industry to industry, better-than-average productivity rises will often signal the decline of unit labor cost.[13] Such a decline affords an opportunity for, but hardly guarantees, price reduction.

---

[9] These are discussed in Roger Bezdek's paper "Conceptual and Empirical Problems in the Measurement of Prices and Productivity," which was prepared, like the present paper, at the request of the Joint Economic Committee.

[10] If a second-order term is ignored, the percentage change in unit labor cost is approximated by the difference between the percentage change in hourly wages and the percentage change in productivity. This truism is stated like a policy decision, and obscurely besides, in, for example, *How to Compute Productivity Gains*, Internal Revenue Service Pub. S-3020, revised to June 1972. The title is misleading; the pamphlet focuses mainly on the computation of change in unit labor cost and gives the unfortunate impression that all increases in such cost are "allowable."

[11] "A New Productivity Yardstick," *Business Week*, May 13, 1972, p. 122.

[12] According to the source cited in footnote 11, the 433 industry rates, weighted by sales, average 3.3 percent; and the manufacturing rates average 3.6 percent.

Falling below the adopted productivity standard of 5 percent per year are many familiar targets of complaint by the antitruster and the consumer. Thus, on productivity grounds alone, the prospects of price reduction would appear unpromising for, say, contract construction as a whole, iron and steel (3312), automobiles (3711), machine tools (3541, 3542), primary aluminum (3334), and bread and cake (2051).[14] Whoever balks at the inclusion of automobiles here, however, might be tempted to lower the productivity criterion; this industry's trend rate, 4.1 percent, is *above* the weighted average for the Price Commission's list.

Rates above 5 percent per year for the period 1958-69 are shown for many industries (some of them sizable) in that list. Thus, a gross screening according to the 5-percent standard would suggest that closer scrutiny for price-cutting potentials is warranted in these cases and some others: coal mining (anthracite, 111 and bituminous, 121), flour milling (2041), rice milling (2044), brewing (2082), distilled liquors (2085), soybean oil (2092), women's hosiery (2251), tufted carpets and rugs (2272), tire cord and fabric (2296), veneer and plywood (2432), business forms (2761), industrial gases (2813), cyclic intermediates and crudes (2815), industrial organic chemicals (2818), plastics materials and resins (2821), cellulosic man-made fibers (2823), medicinals and botanicals (2833), pharmaceutical preparations (2834), fertilizers (2871), agricultural chemicals (2879), adhesives and gelatin (2891), carbon black (2895), petroleum refining (2911), miscellaneous plastics products (3079), transformers (3612), household refrigerators and freezers (3632), household vacuum cleaners (3635), radio and television receivers (3651), picture tubes (3672), semiconductors (3674), and motorcycles and bicycles (3751).

---

[13] Of course, declining unit labor cost can more easily be ascertained by comparing changes in payrolls and output—a point made at the end of the preceding section.

[14] The numbers in parentheses refer to the Standard Industrial Classification system of 1967. They identify more clearly the industries to which I often give only informal names.

From the annual productivity series supplied by the Bureau of Labor Statistics for 1958-1970 (printouts dated July 19, 1972), a very similar catalogue is derivable. One inconsistency, however, stands out—for synthetic rubber (2822). Here, the Commission trend rate is only 2.7 percent, or below average. In contrast, the BLS printouts show that output per employee man-hour increased by about two-fifths in all manufacturing during the span of a dozen years but doubled in the synthetic rubber industry.

A perusal of the accompanying price series supplied by BLS makes it clear that significant declines have indeed occurred in many instances with the support of productivity supergains. In the case of synthetic rubber, the price decline was only slight (1.5 percent) between 1958 and 1970. In some other instances in which productivity doubled, however, the price cut was striking—e.g., plastics materials (30 percent), industrial organic chemicals (18 percent), cyclic intermediates (20 percent), medicinals and botanicals (25 percent), carbon black (12 percent), electrometallurgical products (3313, 23 percent), air-conditioning and refrigerating equipment (3585, 9 percent), radio and television receivers (22 percent), tufted carpets and rugs (21 percent), knit fabric mills (2256, 25 percent), and linoleum (3996, 8 percent). For picture tubes, which experienced nearly a trebling of productivity, the price cut was 46 percent between 1958 and 1970.

Even in the generally inflationary years since 1967 productivity supergains have permitted various industries to realize—or endure—price cuts. The BLS printouts show productivity and price advances of 6 and 8 percent, respectively, for all manufacturing in 1967-1970. Against this backdrop, they reveal a much sharper productivity rise, 29 percent, for plastics materials, accompanied by a price decrease of 14 percent. A productivity increase of nearly 15 percent is indicated for synthetic organic fibers (2824), which experienced a further price decline of 2 percent in 1967-1970.

Outside of chemicals, similar combinations are also to be found. In the textiles group, for example, knitted fabric mills gained nearly 12 percent in output per employee man-hour during 1967-1970 while prices fell 7 percent; tufted carpets and rugs posted an increase of 13 percent in productivity as prices receded another 2 percent. For radio and television receivers, a smart gain of 26 percent in productivity was bracketed with a fall of more than 6 percent in prices. A more striking productivity rise for miscellaneous plastics products (3079), 35 percent, was linked to a price retreat of 15 percent. Additional examples, such as picture tubes and optical equipment and lenses (3831), may be cited, as productivity supergains merely supported virtually *stable* prices in still other industries—e.g., in the chemical and textile areas, photographic equipment and supplies (3861), writing pens (3951), and linoleum.

The above report of good correlations between productivity and price changes could, of course, be supplemented by a chronicle of contrary instances. Unremarkable productivity gains have occasionally occurred together with favorable price performance, and better-than-average productivity experience did not always entail either price stability or price decline.

Without a closer analysis of circumstances, previous productivity and price experience provides no sure clue to areas now ripe for price-cutting. Good past records may not be sustainable—in the face, say, of unusual new wage settlements or intensifying foreign competition. Furthermore, poor past productivity-price records should not suggest unimprovability and should not discourage corrective action by, say, managements acting alone or in concert with union leadership or with government. In the motor vehicle group (3710), for example, the productivity performance in 1958-1970 was no better than for all manufacturing; and it was altogether stagnant in 1967-1970, as corresponding prices rose more rapidly than for all manufactures. Should this sort of record in so important an area be accepted with complacency? The same challenge is raised by the BLS statistics for our vaunted iron and steel industry (3312). There, only trivial productivity gains were achieved in 1958-1970, and a drop of 3 percent was indicated for 1967-1970 as the price rise exceeded the percentage increase for all manufactures.

Programs

Since a favorable productivity basis for price reduction cannot routinely be achieved and sustained, and since other circumstances often militate against such reduction anyway, some continuing systemic or institutional correctives may be needed. Without these remedies, achievement and maintenance of average price stability may be out of the question as our nation also pursues the goal of reasonably full peacetime employment. The experience of price cuts cited in the preceding section should encourage a quest for ways to improve the nation's performance in this regard. It is not compulsory to accept the counsel of despair that so respectable an economist as Sumner Slichter was dispensing by the end of the Eisenhower period:

> One fact that stands out conspicuously . . . is that ours is a producer-dominated economy—the consumer is the forgotten man. We have the institutional arrangements that make gains in productivity produce higher wages and higher prices, but no one even speculates about the possibility of altering our institutions so that gains in productivity will produce lower prices. The absence of concern for the consumer is understandable because the consumer does not demand lower prices.[15]

In commenting on systemic correctives, I feel no need to repeat the familiar tax (and other) incentives for upgrading technology and for transforming it into ready physical plant and equipment. I wish instead here to mention again a proposal I have made for reinforcing the guidelines for noninflationary wage behavior: Workers should be encouraged to forego demands for supraproductivity pay gains by the offer of purchasing-power protection for infraproductivity pay increases. My elaborations of this idea for self-enforcement have allowed roles for wage-deferment bonds and for tax write-offs. For symmetry, tax benefits could also be offered to companies that voluntarily share their productivity gains with the public in the form of lower prices.

In speaking of institutional correctives, I like to assume that comprehensive controls will be avoided a bit longer as our mixed economy continues to evolve along various lines into a monitored economy. Even if there is a Phase III that, say, confines wage-price monitoring to the private economic heavyweights, I look toward a Phase-Out also. This is not to say that another episode of peacetime wage-price surveillance will prove unnecessary; indeed, in another paper in this volume, I have predicted a "third-generation" peacetime effort (i.e., a successor to Phase II-III and to Kennedy-Johnson jawboning), but I did not set a date. In the meantime, as government programs proliferate for meeting the challenges of foreign competition at home and abroad, I assume that a certain amount of wage-price monitoring will become absorbed into the criteria for public assistance to private entities or for closer public-private "partnership" (e.g., in foreign trade).

---

[15] Slichter, "Labor Cost and Prices," p. 180.

A happy recent development suggests that government may acquire a new instrument for facilitating price reduction. This instrument is at once more subtle and more pervasively applicable than, say, the antitrust suit or the subsidized "rollback" of selected prices. I refer to the sudden harvest of instances of both "voluntary" and "ordered" price-cuts required for compliance with the Price Commission's profit-margin limitations. The increasing frequency of news reports concerning price reductions to base levels and further reductions that cancel excess revenues generated by higher markups means that more businessmen, government officials, and citizens are becoming aware of the longer-term potentials provided by Phase II regulations.

I have recently rediscovered two institutional proposals offered by the late Walter Reuther for price stabilization. Today, these proposals, for a Price-Wage Review Board and a Consumer Counsel, sound much less stringent than they did when presented at the Upjohn Institute's anniversary conference of 1966. I quote in full the relevant passage in Reuther's address:

> We in the UAW have long advocated the establishment of a Price-Wage Board of Review. This Board would have authority to make public

investigation of situations in which major corporations, powerful enough to dominate key industries, propose questionable price increases or are believed to be maintaining prices at unjustifiable levels. Situations warranting investigation would include those in which dominant corporations attribute their proposed price increases to the collective-bargaining demands of their workers.

Corporations in this dominant position—say, those which control 25 percent or more of a key industry's sales—would have to give notice to the Price-Wage Review Board of any intended price increase. The Board would then have power, before the increase could go into effect, to call corporation officials before it for a public hearing. At such a hearing, the Board would demand from the company all the pertinent facts; and, following the hearing, it would publish its findings and recommendations and the facts supporting them.

If a corporation subject to such review alleges that meeting the demands of a union would force an increase in prices, then the union would be put into the public goldfish bowl along with the corporation. Both parties would be required to appear at the hearings.

To deal with the situation where a corporation may already be charging extortionately high prices, we propose also the provision of a Consumer Counsel. He could initiate hearings when he has reason to believe that a corporation's prices are too high. He would also represent the consumer interest at all Board hearings.

The Board would have no power to prohibit a price increase or to require a price cut. Its function

> would be limited to getting the facts and making them available to the public. If the public were informed, however, with facts and figures making clear that a proposed price increase, or that a union's wage demand, is not justified, it is highly doubtful that the corporation or the union would persist. In a free society, informed public opinion has persuasive force. It has great power to discipline private, voluntary decisions that affect the public interest and to make them socially more responsible.[16]

To conclude this section and my paper, I refer to S. 3970, which nearly achieved enactment in the 92nd Congress and could be adapted or interpreted to accommodate suggestions such as Reuther's. It provides for a Council of Consumer Advisers in the Executive Office and an independent Consumer Protection Agency. According to Section 203, the Administrator of the Agency "may as of right intervene as a party" to represent consumers in proceedings before any other federal agency. Presumably, he could represent the consumer viewpoint in wage-price hearings as a "party at interest," functioning in effect as Reuther's Consumer Counsel. Productivity and unit labor cost would surely have a critical place in the briefs presented for price restraint or price reduction.[17]

---

[16] From Walter P. Reuther's paper in I.H. Siegel, ed., *Manpower Tomorrow: Prospects and Priorities*, New York, Augustus M. Kelley, 1967), pp. 34-36.

[17] The opinion of a Consumer Counsel or a Consumer Protection Agency Administrator would, of course, carry greater weight if it could be backed by a plausible threat to invoke government's market power as a large purchaser, as a "monopsonist."

1972

4

Productivity Statistics for a Third-Generation Wage-Price Monitoring Program

I

This paper focuses on a future that can still be influenced. It looks ahead to the next—the third—program of peacetime monitoring of wages (or incomes) and prices in the United States.

At the 1968 meeting of the American Statistical Association (ASA), I presented a paper from a similar perspective on a similar topic.* I reflected on the contemporary condition of productivity statistics (which has not changed profoundly since) and on the data needs of a forthcoming second "formal program" of wage-price or income-price surveillance, a peacetime program that "would presumably have an explicit statutory basis, pervasive scope, and steady application—unlike its predecessor." By "predecessor," I meant, of course, the pioneer monitoring venture—the Kennedy-Johnson version of jawboning-*cum*-armtwisting, which still

---

Reprinted with minor changes from the 1972 Business and Economic Statistics Section Proceedings of the American Statistical Association.

*See essay no. 5 in the present volume.

showed twitches of life in 1968 but was surely "gone in the teeth" as early as 1966. As for the second program to which I already looked forward, Phase II was hardly being incubated in 1968; indeed, it had not even been ovulated.

The third coming can now be safely predicted, although it would be foolhardy to proceed to particulars—to the triggering events, the specific objectives, the timing, the duration, the onerousness of the new stabilization scheme. With some luck, the nation should enjoy a brief respite, a brief reversion to a freer economy, after Phase II ends (with a bong, perhaps, instead of a whisper). Such an interlude would be all to the good, according to today's dominant mentality (including mine), at least delaying a possible eventual slide into permanent surveillance. Recurring episodes of control presumably pose much less risk than does a continuing program to the traditional values that still command wide loyalty and that retain great functionality besides.

Candor, however, requires acknowledgment that every society tends to adjust to whatever happens; so permanent surveillance, if it does come to ours, could represent a much less traumatic experience than anyone may now expect. I remember being deeply troubled, while a staff member of the Council of Economic Advisers in the Eisenhower years, by the implications of a threatened leap from generalized jawboning, from "macropreachment" of the verities of wage-price-productivity algebra, to selective fingerpointing and selective armtwisting. How relieved I was that the crises of the time could be weathered without open and explicit government intervention in wage-price decisionmaking; and I still like to think that the 1958 *Economic Report of the President* helped to make a difference.[1] In any case, the shocks of two peacetime monitoring programs have since been absorbed. In particular, when NEP* came suddenly in August 1971 under unlikely political auspices, the domestic calm could only make one wonder: Where are the noes of yesteryear? True, the identity of initials with Lenin's NEP was occasionally noted in the press, but no dire ideological conclusion was drawn; and I saw no reference to the fact that the US program came on the 50th anniversary of the USSR's "one step backward" toward capitalism.

---

[1] An appendix cited egregious weaknesses of productivity statistics and presented two (now standard) series for the private sector. These diverged sufficiently to disturb economists and others who wanted only one (or none).

The prospect of another monitoring episode is latent in: (1) the persistence, if not intensification, of cost-push pressures in the private sector; (2) the governmental proneness to outrun revenues, to make budgetary outlays "uncontrollable," and to match or exceed private pay scales; and (3) the continuing weakness of our international balance-of-payments position. My wise and eminent friend, Professor Joseph J. Spengler, has recently summarized in a different way this same disposition of our mixed private-public economy to transform itself into a governmentally-monitored one:

> Today it is assumed that the economic circle can be squared; for . . . it is supposed that a society may have guaranteed full employment, price-level stability, strong producer pressure groups (trade unions, business and agriculture groups, government employees), and freedom from direct controls. In reality, of course, it is impossible for these four objectives to be realized simultaneously; only two, possibly three, are compatible.[2]

---

*Nixon's NEP was a "New Economic Program," and Lenin's was a "New Economic Policy."

[2] Quoted in a "separate statement" by O.D. Duncan and P.B. Cornely included in the 1972 Report of the (Rockefeller) Commission of Population Growth and the American Future.

Incidentally, when I speak of a peacetime program, I merely follow a current convention, ignoring the legalistic and semantic niceties I mastered a generation ago as chief economist of Veterans Administration. Specifically, a peacetime program need not imply the absence of war, even a war that has contributed to the felt need for a control program in the first place. The important thing is that a program should *not* be part of a general mobilization scheme, a scheme for reallocating resources massively in the direction of defense. Stated positively, a peacetime effort is one that is directed against "unusual" and persisting pay and price upsurges threatened by familiar concentrations of market power, by other constrictions of supply, and by the apparent fiscal casualness of government.

The remainder of this paper is intended to be nonpartisan, even "apartisan," but this disclaimer does not mean that I should welcome bipartisan neglect as benign. I am pleased to recall that my 1968 ASA paper was inserted into the *Congressional Record* by Senator Proxmire; that an earlier paper, called "Guidelines for the Perplexed,"* was inserted by him, with the prefatory comment that he did "not agree with it in its entirety," into a volume of wage-price hearings of the Joint Economic Committee.

II

In the design of the third peacetime program, benefit will certainly be derived from the accumulating national experience in "cryoeconomics."[3] Not everyone will distill the same lessons from this experience or discern in it the same set of additional or alternative policy implications. I want to state some of my own impressions since they have a bearing on my view of statistical needs.

---

*See essay no. 9 in this volume.

[3] I regard it as unlikely that the third program would be preceded by any new effort at "gradual" cooling of the economy through monetary means—through deliberate creation, in effect, of "unemployment in the public interest." In 1969, I suggested that, if monetary hemlock is again administered to the economy to purge an inflationary fever, consideration be given to "the sterilization of repatriable dollars that inopportunely swell the money supply and the recapture for public use of 'excess profits' derived by financial institutions from distorted interest rates." (Joint paper with A.H. Belitsky, "The Changing Form and Status of Labor," *Journal of Economic Issues*, March 1970, pp. 78-94.)

First of all, I believe that any provision for the expression of continuing, serious, high-level, governmental interest in private price and wage decisions is bound to have some efficacy, whether this efficacy can be measured or not. Inflation does have a psychological component (which should not, however, be exaggerated into all or most of the problem, or be translated instead into a mystery without handles). Organized groups in our society do exert market power, and dominant business firms in different industries do have some control over the prices they charge. The economics of the modern era has always been recognized as "political economy," and it becomes ever more so. In my opinion, even governmental exhortation has some influence as a form of education and leadership. Furthermore, this intervention, like the more stringent alternatives of surveillance, can be reinforced by budgetary restraints, by an example of moderation in pay revision, by use of monopsony power, by curtailment of subsidies, and by action to expand supply of services when action is taken to create or enhance effective demand.

Above all, adoption of a formal program of surveillance should not forestall governmental action to help make pay and price standards self-enforcing. Indeed, by "internalizing" public imperatives, by supplying incentives for compliance, we could get much better economic results while diminishing the danger of coercion and reducing inevitable inequities. For example, with all the futility at the command of an ordinary citizen, I have proposed in the past that pay-deferment bonds might be issued for protecting the purchasing power of pay increments that fall within the guideline limit. Alternatively, and with equal unsuccess, I have suggested that tax benefits offsetting cost-of-living rises be allowed for rewarding the "good guys" who accept infraguideline pay adjustments—for protecting them against the inflation abetted by the "bad guys." I assume that the enlistment of Internal Revenue Service in the administration of Phase II will inspire some new ideas for using the tax system to promote greater price stability.

The remarks I have already made point to a vital distinction between the trumpeted equity for some and the muted justice for all. The uneven distribution of market power leaves the least organized citizens especially vulnerable to inflationary aggression and inflationary pollution by others. Perhaps, as the historic tendency toward organization proceeds further, a better equilibrium of forces will finally emerge; or, perhaps, the indecisiveness of the routine economic war of all against all will become clear enough to encourage greater cooperativeness in the common good under governmental aegis. Another possibility is that the organization of consumers, the elderly, and others may increase the number of "parties at interest" seeking a voice in private-public wage and price determinations. For the third generation, however, I prefer to continue emphasizing the potential of incentives for self-enforcement—a bird much closer to hand.

In short, a monitoring effort can help to moderate inflationary pressures, but its limitations and dangers counsel modest objectives, less than complete coverage, and nonpermanence. It is only one tool that has to be used in conjunction with others, and it is hardly the most important one. It is a gross tool also, ill-suited to fine or frequent adjustment of relative prices and wages. Since it cannot achieve justice for all, it should aim for sufficient credibility during its lifetime. It deals with only some of the sources and aspects of inflation, diverting attention from fundamental causes and mechanisms to an administrative process. Beyond a certain point, especially if it is long-lived, it could help institutionalize inflation at a rate that is more or less tolerable to the better-situated elements of the population. Termination, the end game, is difficult; but involvement of the Internal Revenue Service in administration may itself encourage public resolve to find a way and hasten the day. As for coverage, I like the idea of experimentation in the omission of various categories of firms and employees from surveillance; but such relaxation should be tried only after very comprehensive monitoring has first been installed.

At this point, I wish to add that any comprehensive "freeze" should do more than provide time for getting monitoring machinery into place. It should not merely change the rhythm of inflation—i.e., delay the process only temporarily in exchange for a subsequent compensatory bulge. Instead, it should slow the (average) metabolic rate, envisage no later speedup. Insofar as practicable, what is foregone should also be bygone in pay and profit; and improvement should be sought in the relation of output to demand.

III

A monitoring program makes very considerable demands on the nation's public and private data base—demands that cannot really be met. This fact counsels modest objectives for the program and tolerant administration, too—in addition to counseling the desirability of improving data systems.

The upgrading of the private data base is especially necessary for the maintenance of decentralized economic decisionmaking. A monitored company must survive as well as comply. It has to live and prosper in a competitive world, according to the best and most relevant truth that it can ascertain, as well as conform to administrative truth. In particular, a monitor may act "as if" a large company's *current* productivity pace is correctly reflected by the *past* performance of the industries in which its activities are located; but the company's management needs to be aware of the actual state of affairs.

Having had occasion in the past 15 years to advise firms and other consultants on company measurement systems, I am impressed with the apparent dearth and the routine character of accessible private productivity series. I am aware that company officials might not wish to volunteer information that could thereafter be forced onto the bargaining table as wages are negotiated. I also appreciate that more than one logical center of responsibility for such information may exist in a modern corporation—say, the accounting department and a vice president's planning staff—and that internal rivalries could keep an outsider (or an ineligible insider) in the dark. Furthermore, "management information systems" can, in this age of computers, become so turgid that the crude productivity measures sometimes included in their welter of periodic printouts simply go unrecognized and unanalyzed.

Perhaps, the situation of companies will be a bit more comfortable under the third-generation program. The emphasis in Phase II on productivity figures and the limited official guidance given for their computation must have stimulated company interest in such statistics. Furthermore, the word "productivity" has suddenly blossomed into common speech, becoming as popular and magical as, say, "R & D" and "automation" were not so long ago.

Above, I referred to the unlikelihood that the data demands of a monitoring program could truly be met. One thing I had in mind—other than the dearth of company measures of productivity—was the difficulty of expanding the public and private base of correlative "atomic" data on output, price, man-hours, and so forth. If detailed and integrated industry information were available on a "product" basis, we could always derive relatively unambiguous output and productivity measures therefrom. We could also obtain symmetrical, coordinate index numbers of productivity and other variables deemed pertinent to a wage-price or income-price analysis. Resort would not be necessary to techniques of deflation, which commonly involve numerators and denominators that do not quite match, that are only obscurely related in structure and content. Such techniques provide false comfort by meeting the requirements of verbal algebra; but, unfortunately, the operational meaning of an index number depends instead on its data content and on a strict literal algebra. Besides, when it is difficult even to conceptualize the specific "product" of an economic activity (as in many service areas), the results of deflation are more nebulous than ever.

A second serious statistical conundrum is posed by the fact that a monitoring program must be oriented toward the future rather than the past. What matters in fighting inflation or its symptoms is what productivity *will be* in the period to which a wage or price decision applies. The record of a recent year or of the past decade is relevant only insofar as it forecasts correctly what productivity will be. In a period of expected recovery, for example, productivity will surely not change as it has in a period of observed recession. In a period of rapid growth of output, productivity does not move as it does when saturation of a market is approached or reached. Even in some of the earliest guideline comments, as in the 1958 *Economic Report of the President,* it was appreciated that productivity prospects are more pertinent than productivity history; but history, unfortunately, has become the center of concern.

These insuperable data problems—the difficulty of getting correlative "atomic" data for all companies, industries, and sectors and the difficulty of making reliable productivity forecasts for the same entities—should be recognized in the design and implementation of monitoring policy and programs. Statistical compromises, substitutes, and alternatives should be devised and interpreted with sufficient sensitivity to ideal algebraic requirements and to economic realities.

At this point, I take note of the typical separation of wage and price monitoring. In the third-generation program, I should like to see closer coordination of the two tasks. If the administration of wages has to remain separate from the administration of prices, it is still desirable, and it even becomes necessary, to estimate the economy-wide implications of particular adjustments. In principle, at least, the input-output tool, identified with the name of Wassily Leontief and painstakingly developed at the Department of Commerce as well as at Harvard, would seem adaptable to the purpose. Again in principle, the input-output system could even provide a cumulative register of interindustry impacts and repercussions as additional wage and price determinations are made.

Another approach to coordination would involve the design and construction of hierarchically and laterally consistent index numbers for companies, industries, and higher aggregates. The difficulty of obtaining correlative "atomic" data, already mentioned, remains a serious practical obstacle. By hierarchical consistency, incidentally, I mean vertical compatibility—structural compatibility for aggregation (of companies into industries, etc.). By lateral consistency, I mean that the multiplicatively-related variables of interest to the wage and price monitors have been treated symmetrically, in an algebraically similar manner. I shall say more about lateral consistency below.

When wage and price administration is pursued as two distinct tasks, two different kinds of productivity seem to be of interest—and they should not be confused. The wage administrator inevitably focuses on labor productivity; but the price administrator's interest in cost structure leads to all-input (i.e., factor *and* nonfactor) productivity. Of course, if all-factor returns are to be monitored, rather than wages (and salaries), all-factor productivity has to be used instead of labor productivity. It is a mistake to assume that productivity measures are quantitatively equivalent regardless of differences in the scope of the denominator.

It should also be clear that any kind of productivity measure can be written in two distinct ways that are algebraically equivalent. Each has a "quantity" form—a ratio of output to input. Each also has a "price" form—the ratio, in the case of labor productivity, of average hourly earnings to unit labor cost. An analogous expression holds for the measure of all-input productivity. I am aware of the administrative convenience of expressing a percentage change in productivity approximately as the difference between percentage changes in the numerator and denominator; and I am aware that the "price" form may be preferred in such usage. Whatever the form, literal algebra remains relevant; and it is still true that labor productivity and all-input productivity are *not* interchangeable.

If the problem of data supply did not exist, the two monitoring tasks could be coordinated with the aid of an index-number system that incorporates all of the variables of interest and that treats these variables uniformly. In some of my other papers, I have discussed the design of algebraically consistent index numbers for variables occurring in a common context. If sufficiently detailed data were available, one could devise, say, homologous Laspeyres indexes for all the multiplicatively-related variables. A "small" extra constant term could be added to each so that the product of all the indexes satisfies the macroidentity that guided formula design. What I have just described is a generalization to more than two variables of the index-number system attributed to

Stuvel. Other multivariable index-number systems, such as my generalization of Fisher's "ideal" measure,[4] are logically more satisfactory, but they make still heavier data demands.

Simply for the sake of concreteness, I give an idea of the content that might be imparted to the Stuvel-type Laspeyres indexes. A wage monitor might wish to focus on productivity, unit labor cost, and average hourly earnings. A price monitor might wish to focus on three analogous concepts referring to all-factor input. Both, in addition, care about prices—and, perhaps, output. The product of all eight variables (or reciprocals, as required) is the value of output. Accordingly, each Laspeyres measure contains eight terms in the numerator and eight in the denominator. When each index has been adjusted to include the proper additive term, the product of all of them is the value index. The system treats all the variables symmetrically, and the adjusted Laspeyres measures satisfy the proper macroidentity.*

Since data problems do exist, is there not some less demanding alternative? Yes. Monitoring could rest on only *one* productivity index (as in the Kennedy-Johnson program) and, hence, on a simpler coordinating macroidentity. The guidelines for prices and wages (or all incomes) could, for example, be administered with the aid of an index-number system that is anchored to the value of output and distinguishes, say, four (multiplied) variables: prices, productivity (labor or all-factor), the reciprocal of average hourly earnings (or the equivalent for all-factor returns), and payrolls (or all incomes). I shall not go into various possible refinements—such as the matching of net (or gross) output with gross (or net) prices in the several index formulas.

---

[4] I.H. Siegel, "Generalized 'Ideal' Index-Number Formula," *Journal of the American Statistical Association,* December 1945, pp. 520-523.

*The algebra is shown in I.H. Siegel, "A Common Framework for the Index-Number Varieties," *1967 Proceedings of the Business and Economic Statistics Section of the American Statistical Association,* pp. 402-405.

The search for simpler measures may fruitfully be pressed further—toward results that also contain hints for simplifying the monitoring program itself. Specifically, the guidelines rules may be cast in terms of *production* (output) rather than productivity. Somewhat less mystery surrounds the measurement and interpretation of production, and its projection may be contemplated with fewer qualms. Furthermore, since properly-weighted production is additive (from firm to firm and industry to industry), an attractive opportunity for achievement of (approximate) hierarchical consistency is also presented. Weighted production estimates are becoming increasingly available for components of the gross national product according to industry of origin; and these estimates for industries can be matched at the company level with much less inhibition than would be experienced in the case of productivity measurement. The work of the Bureau of Economic Analysis of the Department of Commerce on industry output and on implicit deflators can provide considerable guidance. Perhaps, a program of deliberate measurement assistance to companies would represent a good small public investment for future stabilization efforts and other national purposes.

To see how production could replace productivity in the monitoring process, let us start with the Kennedy-Johnson (and Eisenhower) precept that average hourly earnings (or the all-factor analogue) should rise no faster in the private economy than labor (or all-factor) productivity. Since the earnings and productivity have the same input denominator, this criterion is equivalent (according to verbal algebra, and can also be made equivalent in terms of literal algebra) to the rule that: Payrolls (or all-factor returns) should rise no faster than output. This rule, incidentally, also amounts to the standard that: An output-weighted index of unit labor cost (or of unit all-factor cost) should remain at, or fall below, 100. If unit labor (or all-factor) cost is assumed to be critical to price determination, and if policy tolerates a rise of 2.5 percent in such cost *and price,* then the index limit has to be set at 102.5 instead of 100.

Going a step further, we may envisage a third-generation monitoring system in which *companies* are asked, in the first instance, to steer their courses according to rules relating to production, factor-payment, and total-cost statistics for their *own* operations. Preferably, the statistics should represent projections for a target period (e.g., the next year). These are the rules to be followed by each company:

1. Target factor payments should not exceed target output weighted by base-period unit factor cost. (In obvious symbols, $\Sigma q_1 f_1 \leqq \Sigma q_1 f_o$.)

2. Target total cost should not exceed target output weighted by base-period total cost per unit. (In obvious symbols, $\Sigma q_1 t_1 \leqq \Sigma q_1 t_o$.)

The first rule sets a rein on incomes; the second, on total cost expressed in "current" dollars. A third inequality, concerning the difference between total cost and total factor payments, is implicit in these two. The rules can be adapted to reflect a tolerated income increase or price increase—by the simple insertion of the appropriate factor on the righthand side of the appropriate inequality.

Every *company,* in short, could be given greater latitude in regulating itself according to the guideline criteria established for the third-generation surveillance program. Achievement of the national stabilization objective is not jeopardized by decentralized decisionmaking if the standards are actually followed. The real problem is created by the exceptions—by deliberate or tolerated deviations from the uniform criteria. When exceptions are unavoidable, the price monitor and the incomes monitor should (1) make compatible rulings and (2) look for other instances in which compensatory constraint might be feasible. The algebra of the problem is much easier for the administrators to follow in terms of production aggregates than productivity averages.

Other advantages of shifting the emphasis to production could be cited. Much of the difficulty of measuring productivity really involves production, so explicit attention to issues involving the latter concept (e.g., the availability of suitable quantity data and the design of suitable deflators) may be broadly beneficial. Furthermore, stabilization is only one of the continuing or recurrent challenges of the domestic scene; and projected output growth can be related more naturally than productivity change to the other economic aggregates with which national policy is concerned, such as the volume of employment and the supply of money and credit.

IV

To conclude this paper, I briefly restate a few of my points without weaving them into a complete "argument." I regard a third peacetime monitoring effort as inevitable. Although I expect it to have some efficacy, it will need support in the form of, say, fiscal "prudence." I hope that the program will be nonpermanent, and I prefer that the errors be made in the direction of liberal administration. In particular, I should welcome the building-in of economic incentives for self-enforcement—at least for voluntary restraint of wages and salaries. With respect to statistics, I emphasize needs for focusing on productivity prospects rather than history and for providing frameworks for coordination of income and price monitoring. Most important, I propose a switch of emphasis from productivity to production in the design of monitoring rules. This shift, I believe, offers a key to easier and more consistent guideline administration. Furthermore, it promises a better route toward strengthening the private data base. Improved statistics, featuring production, would allow *companies* to contribute more effectively to the national stabilization objective and to retain maximum freedom for economic decisionmaking.

1968

5

Wage-Price-Productivity Statistics: Old Gaps and New Needs

Information for Future Guidelines: An Uncomplacent View

This paper concerns a field of economic policy that is heavily laden with statistical interest. It concentrates on the disparity between the data and measures that would be required for the flexible or "liberal" administration of a future formal program of wage-price monitoring and the data and measures that are likely to be available instead. By flexible or liberal administration, we mean the permission of wide diversity in company and union decisionmaking. The desideratum is: *Official tolerance, if not encouragement, of something like the present broad private discretion in wage and price determination, within the mathematical and commonsense limits imposed by a national aim of aggregate noninflationary performance.* Although we speak here of wage-price monitoring, we do not intend to exclude the alternative prospect that nonwage and nonsalary remuneration

---

This paper presented at the 128th Annual Meeting of the American Statistical Association, Pittsburgh, August 21, 1968, was published in *Congressional Record*, September 11, 1968, and also appeared in the *1968 Proceedings of the Business and Economic Statistics Section of the American Statistical Association.*

too will come under regular scrutiny, that a comprehensive "incomes policy" will actually be adopted.

Our topic has obvious civic importance but may attract only a small fraction of the attention it deserves. Indeed, past and contemporary experience suggests that the subject may continue to be slighted even by technicians responsible for the compilation of data and for the derivation, application, and interpretation of measures. In addition to representing a professional communication, this paper has lessons for public officials, legislators, and business and labor executives, all of whom help to make and carry out policy; and for journalists, who could serve more effectively in educating the larger community by becoming better informed themselves.

In the discussion that follows it is assumed that:

A. Our nation-state and national economy will survive the disintegrative social and political strains which have so dramatically become evident.

B. Continual, ever-fuller employment will become a more explicit federal aim, emerging as the preferred and most conservative route among those tried or promised for the general achievement of higher personal incomes and higher living scales.

C. Active fiscal policy in support of this extended employment objective will become incorporated in the national style, whatever the political party in power and whatever the name by which such policy is called.

D. Accompanying upward pressures on wages and prices will demand an institutional counterweight, and this corrective will be provided sooner or later by a formal program of wage-price surveillance. A formal program would presumably have an explicit statutory basis, pervasive scope, and steady application—unlike its predecessor, which was born in 1962 and is commonly declared to have died *circa* 1966, but seemed in the summer of 1968 only to have been sleeping on a tombstone.

The reference to "disparity" in the second sentence of this paper provides a clue to the position that is elucidated here. An examination of the present state of the public and private information supply, of past gains, and of portents does not justify confidence that a future formal program of wage-price monitoring is bound to be benign. Although the decision to adopt a policy commonly runs ahead of the social stock of data, derived measures, and knowledge, the conduct of a policy is critically affected, nevertheless, by the availability, compatibility, and diffusion of information. Thus, in the absence of an adequate information base, administration could well be Procrustean, simplistic, arbitrary, uneven, capricious. The total statistical base is now woefully inadequate for liberal guideline administration, and it seems destined to remain so. Indeed, if the authoritarian potential of formal monitoring does not materialize in the future, credit will have to be given to factors other than the quantity, quality, and distribution of wage-price-productivity information. Some possibly compensatory features of the future program are specified later.

This judgment goes counter to the impression conveyed by ubiquitous and recurrent reports of statistical improvement and of continual progress toward greater and even more precise economic knowledge. Despite the incremental advances actually being made all the time in filling various advertised gaps in the federal statistical system (and these gains and the efforts they entail are not here disparaged), a fundamental limitation of the data base for flexible administration of wage-price-productivity policy persists. This root problem has been obvious throughout the long history of index-number construction. Although it is taken for granted by most makers and users of measures, it is not subject, alas, to casual or incidental correction by incremental gap-filling progress. The data limitation continually obliges the derivation, application, and juxtaposition of indicators that may carry an intolerable wrapper of noise around an undistinguishable core of message. As for the private contribution to our national information resource, companies obviously have great new opportunities to enlist the computer in support of diversity in decisionmaking without prejudice to national guideline constraints. These opportunities are not likely to be exploited effectively or soon enough, however, especially in the absence of determined government leadership *to improve and enlarge the joint public-private data bank for the express purpose of compatible measurement of key guideline variables from the national economy down to the firm.* Significant implementation of this purpose would provide an information base that also is better suited for solution of *tomorrow's* urgent measurement problems—problems yet to be defined.

The inappropriate focus of the informal guideline program adopted in 1962 on *past* productivity trends obscures another statistical complication that will have to be faced in any serious future effort to restrain the inflationary pressures engendered by pursuit of ever-fuller employment. Wage criteria should be based on *prospects* regarding productivity and unit labor cost, not on history—and forecasting must remain an unreliable art in a society that is still mostly open-ended. Unfortunately, the mechanical extrapolation of productivity trends for the whole economy, for its parts, and for firms is not the same as making *correct near-term projections.* Furthermore, errors of optimism in projection cannot be easily undone; the Moving Finger, having writ, cannot be lured back by political piety or bureaucratic wit to cancel embedded inflationary excesses.

In short, the outlook for permissiveness in a regime of formal wage-price guidelines is dimmed by the improbability of a great leap forward with regard to the volume and soundness of measures and by a need to depend, in any case, upon uncertain forecasting. From the statistical standpoint, Procrustean enforcement would appear inevitable, as experience with the informal program instituted in 1962 may also hint. Because of data problems and conceptual difficulties, historical change in guideline variables cannot now be gauged unequivocally for the majority of industries and industry complexes; and, in many important instances, it is not now being gauged at all. Furthermore, the informational requirement for constructing guideline index numbers that are mutually adapted and modularly compatible from the national economy down to the firm greatly exceeds any reasonable prospect of supply. Indeed, an expectation of substantial improvement in this direction could well prove a silly dream. Furthermore, even if the desired measures were miraculously to become computable, the challenge of accurate projection would still have to be met. It appears that to live as free men by the numbers under a new dispensation of formal guidelines would involve a double miracle—the capture not simply of unicorns but of unicorns that fly.

The presentation below of two sets of structurally matched index-number formulas that are especially pertinent to flexible guideline administration makes the staggering informational requirement very explicit. Each set of formulas, based on a common paradigm, deals equitably with all associated guideline variables and would permit modularly compatible measurement for all levels down to the individual firm. One of the two sets, furthermore, could assist in the conduct of integrated wage-price and monetary policy—a marriage essential to the success of any program for continual containment of inflationary forces.

Although the two index-number schemes cannot be effectively implemented with the information that now exists or that is likely to become available in the visible future, they do provide helpful models—standards for practice, for criticism and evaluation, and for possible technical improvement. They offer criteria for design and analysis of constructible compromise measures and for appraisal of available measures—the measures that have to be used in conjunction with each other for want of better alternatives. They indicate desirable directions of data reform and extension, whether or not movement along these paths is practicable. They suggest the kinds of test and experimental measures that ought to be approximated wherever feasible. Finally, our algebraic exercise is relevant, even at the present time, to an undertaking announced in the 1968 *Economic Report of the President* (p. 92): "A new economic tableau that will ultimately provide comprehensive information on output, labor input, price, and productivity by major sectors on a quarterly basis."

Incrementalism and the Unpolishable Flaw

The fundamental defect in our public and private information system, from the standpoint of measurement for liberal guideline administration, is easy to state. It is: *The absence of coordinated or correlative data on a product or quasi-product basis for quantities and prices of outputs, of factor inputs, and of inputs derived from other places or time periods.* By quasi-products, we mean definable components of normally identified gross products and services—especially components that, by virtue of greater homogeneity, are more amenable to aggregation. These components, which may be called "subproducts" in the case of physical output and "activities" in the case of services, correspond to the "arcs" of total output cycles.[1]

---

[1] The measurement of quasi-products has been proposed and discussed before by I.H. Siegel—e.g., in *Concepts and Measurement of Production and Productivity*, Washington, U.S. Bureau of Labor Statistics, 1952; and "The Concept of Productive Activity," *Journal of the American Statistical Association*, June 1944, pp. 218-228.

The flaw in the data base cannot be easily or significantly remedied, certainly not by gap-filling here and there. The systematic compilation and maintenance of "atomic" correlative data would not only prove an overwhelming task and entail prohibitive costs, but it cannot even be pursued very far (especially in the case of nonmanufacturing industries) without encountering stubborn, perhaps insuperable, conceptual problems. Indeed, the designation of products or quasi-products for such service industries as government and finance and for such pursuits as research and development is a philosophical challenge that most economists and statisticians have become accustomed to shun like a direct glance at the Gorgon Medusa.

If coordinated basic data were generally available, it would be possible to do two things that are important for flexible guideline administration—and much else besides. First, structurally matched, or laterally consistent, index numbers could be constructed for the guideline variables. Second, hierarchically compatible index numbers could be constructed for these variables for all levels of aggregation, from the national economy down to individual companies. Furthermore, more meaningful quarterly or monthly measures could be devised; and the quantitative treatment of joint or overhead operations, inventory changes, multiprocess end-products, nonstandardized output, and services in general could be rendered more plausible. The measure for each guideline variable would be certain, according to its design, to be an internal mean of relatives—i.e., a number lying between the minimum and the maximum change ratios computed (or computable) for individual products or quasi-products. The index for any higher level of aggregation would also be an internal average of the corresponding measures for lower levels. Although index numbers, or measures purporting to be index numbers, are usually interpreted as internal means, the presumption may not be warranted. Their manner of derivation frequently renders them conceptually vague and structurally nondescript—black boxes filled, perhaps, with black jelly.

As we look about, we may well be impressed, if not reassured, by the cheerful acceptance of the chasm between desirable and actual information for guideline use. In general, it is agreeably assumed that the statistical community can and will make do; that ingenuity and cosmetics may be substituted indefinitely for coordinated data compiled on a product or quasi-product basis; that, once acknowledged, the fundamental flaw in the data base may salutarily be ignored. Little curiosity is usually shown regarding the conundrums of quasi-product definition and quantification, and only occasional enthusiasm is registered for a frontal assault on these difficulties. Two decades or more ago, the industry and product detail of the biennial and quinquennial *Census of Manufactures* inspired the microdata approach to production and productivity measurement. The paucity of building blocks was recognized; company surveys were stressed for augmentation of the supply, but the difficulty of significant further progress within and beyond manufacturing was also conceded. In the subsequent era of national accounting (in current and constant prices), the illusion has been fostered that indirection can generally break the data *impasse*. According to the new rites, sound statistical edifices may supposedly be erected by a quick and dirty (really, very sanitary) application of an algebra of words. It is fashionable, for example, to deflate thick or thin veneers of value information by more or less relevant, and often scrappy, price indexes. This technique does readily yield facades, if not solid buildings; and it often simulates measurement for larger components of the economy with much less information and effort than for smaller components. Strangely, the conceptual and structural obscurities of deflated measures and of others derived with the benefit of a ceremonial cancellation of words help them to circulate like universal coin; they are exempt from fine-grain scrutiny and accepted too eagerly for all contexts and purposes.

The challenge of liberal guideline administration should remind us of the continuing relevancy of the index-number chapters of elementary textbooks in economic or business statistics. Although latter-day sophistication seems to sanction routine resort to indirection and to low-grade verbal algebra in measurement, we still have to imagine what direct attempts with appropriate microdata would yield. Such Platonic types ever provide the standards required for approximation and appraisal. The object of computation, after all, is not simply to generate numbers having agreeable labels but, rather, to derive adequate and dependable answers. It is useful to know the difference between what is done and what ought to have been done instead. To bang with a sword upon the reflection of the Medusa in the shield of Perseus is not the same as slaying her.

The flood of public and private studies and reports offering wage-price-productivity computations or calling for improvements in this general area rarely addresses such fundamental matters as the enlargement of the stock of coordinated data and the provision of laterally and hierarchically consistent measures. The dominance of incrementalism is as clear as it is natural. It is evident from a perusal of representative contributions to the literature of the past decade or so—e.g., a report made in 1957 to the Joint Economic Committee, *The National Economic Accounts of the United States* (especially Chapter 6); *Economic Reports of the President* for 1958 and more recent years, including 1968; the "Special Analysis" of federal statistics included annually in the *Budget of the United States Government;* the 1962 report of the President's Committee to Appraise Employment and Unemployment Statistics, *Measuring Employment and Unemployment;* the 1964 report of the Bureau of the Budget on *Measuring Productivity of Federal Government Organizations;* and numerous documents issued by the Joint Economic Committee, which held hearings and reported in 1967 on "The Coordination and Integration of Government Statistical Programs."

Incremental statistical advance has, of course, left some important old gaps unplugged while also not improving our capacity to meet today's—or tomorrow's—fundamental measurement challenges. In this connection, note should be taken of some remarks made by the president of the American Statistical Association (ASA) at the end of 1967.[2] Despite more than a trebling of government expenditures on statistical programs in the course of a decade, he observed that the outlays still amounted to "not quite one-tenth of 1 percent of the Federal budget." Despite the technical progress made in the past, he could still list "better statistics on wages, productivity, and unit labor costs" as his "first plea" for "needed improvements" in economic measurement. In particular, he cited the need for a comprehensive indicator of hourly earnings in manufacturing, one that covers all employees and includes fringe benefits. He also referred to "the inadequacies of current measures of output per manhour and of labor costs per unit of output." About such measures, which have "highly important uses," he said:

> They are needed monthly, they should be comprehensive as well as comparable in their coverage, and they should also be made available for individual industries. Progress is being made in some of these directions, but the results are scarcely visible. I believe there is need for a very significant improvement here.[3]

---

[2] G.H. Moore, "Some Needed Improvements in Economic Statistics," *American Statistician,* December 1967, especially p. 29.

[3] Ibid., p. 29.

This statement, of course, has remarkable implications for a radical revision of the national data base. The statement demands, in effect, a vast commitment to compile correlative information for subproducts and homogeneous activities. Such a reorientation of federal statistics, however, seems no more likely now than it did, say, when the present author explicitly noted the same need in the early 1950s.[4]

More recently and in another role, the same president of the ASA took oblique cognizance of a persisting defect in manufacturing production statistics and of a dubious method of measuring manufacturing productivity. The statistical defect has been exacerbated during the past generation of general broad progress, and the exceptionable technique of deriving productivity estimates for manufacturing seems to have become the norm:

> The precision of the inferences drawn from economic data often depends crucially upon a clear understanding of how the data were compiled and what they signify. As an example, take the fairly common practice of obtaining a current index of productivity change by dividing the Federal Reserve index of industrial production by the man-hours of employment of industrial workers. Unless one were aware that the compilers estimate a very large fraction of the production index from man-hours of employment adjusted by extrapolated estimates of change in output per man-hour, one would not realize that the computation was to a considerable degree simply reproducing the previous extrapolations. Nor would one be con-

---

[4] Siegel, *Concepts and Measurement*, p. 99.

> cerned to find out to what extent one's conclusions were affected by this circumstance.[5]

This quotation refers, in a veiled manner, to the fundamental data flaw that creates a permanent quasi-gap in the main index of industrial production and leads to a most uncritical use of low-grade verbal algebra in productivity measurement. It recalls more direct—and ineffectual—allusions made many times during the past two or three decades to the same regrettable defect of the industrial production index.[6]

Identities for Measurement and Administration[7]

A central place in guideline theory and practice must be reserved for verbal or accounting identities. Such definitional statements, especially multiplicative ones, provide useful frameworks for the design of mutually adapted formulas to represent the guideline variables, for a discriminating choice among available measures, and for a distinction between mere verbal algebra and the more rigorous requirements of literal algebra. By contributing to an appreciation of the difference between micromeasurement and macromeasurement, they make clear that latitude exists for discretion in guideline administration—that the prescription of macroconstraints on aggregate behavior does not preclude microflexibility, as though the whole economy were simply one firm making one product.

---

[5] G.H. Moore, "Toward Precision in Economic Knowledge," in *Toward Improved Economic and Social Measurement: Forty-Eighth Annual Report,* National Bureau of Economic Research, New York, June 1968, pp. 16-17.

[6] See, for example, Siegel, "The Concept of Productive Activity" (footnote 1), pp. 227-228; and W.D. Evans and I.H. Siegel, "The Meaning of Productivity Indexes," *Journal of the American Statistical Association,* March 1942, especially pp. 109-110. In "Progress and Problems of Physical Output Measurement," an unpublished half-century review paper presented by Siegel at the 1950 meeting of the American Statistical Association, the following sentence appears: "The Federal Reserve index structure was kept standing [during World War II] by feats of statistical carpentry which otherwise had some dubious aspects—like the use of man-hour series, generally with pseudo-productivity adjustments, for Government manufacturing facilities and for industries accounting for two-fifths of the private manufacturing aggregate in the prewar period."

[7] This section derives from other writings of the present author—e.g., *Concepts and Measurement;* "On the Design of Consistent Output and Input Indexes for Productivity Measurement," in *Output, Input, and Productivity Measurement* (Princeton: Princeton University Press, 1961), pp. 23-41; "Systems of Algebraically Consistent Index Numbers," *1965 Proceedings of the Business and Economic Statistics Section of the American Statistical Association,* pp. 369-372; and *Aggregation and Averaging* (Kalamazoo: The W.E. Upjohn Institute for Employment Research, May 1968).

At the atomic level, identities are unambiguously translatable into numbers; but, for higher levels, the correspondence between words or symbols and the magnitudes representing them has to be contrived. Identities, being definitions or tautologies, are necessarily true for the associated variables of individual products or subproducts. When we deal with combinations of products or subproducts, however, the congruence of words and numbers does not automatically obtain. Thus, verbal identities have to be *made* or *kept* numerically true for firms, industries, and higher levels of aggregation; and two general procedures are available for so doing, one of which is far superior to the other according to the viewpoint of this paper.

The less desirable method of assuring correspondence between words and numbers is the one frequently practiced in index-number work. "Any old" measures are accepted for all but one of the macrovariables associated in an identity, and the remaining magnitude is determined residually (e.g., by deflation, multiplication, addition, or subtraction). The nature of this residual measure depends entirely on the content and structure of its companions; and gilt may not be acquired by such association. The magnitude may be volatile and spurious; among other limitations, it may lie outside the range of the relatives for products or subproducts.

The second approach to congruence is preferable in principle but would require a fundamental overhaul of the data base. It takes direct account of the requirements of literal algebra as a matter of design. It specifies the forms and ingredients of the measures of the jointly considered variables and assures that these variables are treated equitably. It may also assure that the index-number formulas register changes intermediate in magnitude between the minimum and maximum relatives for individual products or subproducts; and that the numerical results obtainable directly are also obtainable by such indirect techniques as deflation.

To give concreteness to these remarks and to provide a corridor to the final sections of this paper, we consider three examples pertinent to guideline measurement and administration. The first identity is the familiar one connecting hourly compensation, unit labor cost, and productivity:

$$\text{Average hourly remuneration} \equiv \text{Unit labor cost X Output per man-hour.}$$

When hourly remuneration rises more rapidly than man-hour productivity, unit labor cost necessarily rises too, and this increase exerts an upward pressure on prices. But the pressure is not necessarily translated into a price increase—for any firm or for the whole economy. Whether or not such translation occurs is a proper matter for observation or econometric inquiry. Certainly, the translation should not be *forced* by a guideline interpretation that insists on the removal of all companies from the ingenious world in which they actually live to a simplistic Cobb-Douglas model.

If we are not satisfied to confine attention to unit labor cost or if we do not regard it as properly determinative of price change, we may use an identity that brings price explicitly into the picture. Doing so also requires the introduction of a term representing the share of wages in value added (or total factor income):

$$\text{Average hourly remuneration} \equiv \frac{\text{Payroll}}{\text{Value added}} \times \text{Price} \times \text{Output per man-hour.}$$

This expression may be of greater administrative and analytic interest, but it would also require more information.

Returning to the first identity above, we may multiply both sides by man-hours and arrive at a statement that still focuses attention on unit labor cost, but as the link between two aggregates, total payroll and total output:

$$\text{Payroll} \equiv \text{Unit labor cost} \times \text{Output.}$$

This version has certain advantages over the original with respect to measurement and administration. It is also useful in joining growth and fiscal policies to monetary policy—a coordination greatly to be desired for price stabilization. If constant unit labor cost in the economy at large is deemed to be critical for price stability, the new statement suggests that total payroll should not be allowed to rise more rapidly than total output. According to the quantity theory of money and various proposals for translating this theory into practice,[8] the increase in the supply of money and credit should be reasonably related to the prospect for output. Consequently, the joint policy standard may be stated thus: *The payroll total should not be allowed to rise faster in the whole economy than aggregate net output, which in turn should govern the rate of increase in money and credit.*

Four observations are in order:

A. Since the three verbal relations for guideline variables are atomic definitions that are to be preserved at higher levels of aggregation, they need to be viewed as truisms not subject to negotiation. Thus, if we really mean to preserve price stability through constancy of unit labor cost, we are not at liberty to sweeten an identity with a cost-of-living adjustment. An identity cannot be bribed in the interest of equity. This remark is not a value judgment; it does not propose that equity should be subordinated politically to literal price stability.

---

[8] See, for example, *Standards for Guiding Monetary Action*, Joint Economic Committee, U.S. Congress (Washington: 1968).

B. For liberal guideline administration, it is necessary to concede that many different frequency distributions, many different patterns of company (and union) behavior, are compatible with stability of average unit labor cost and of the price level. Indeed, if every company makes a wage adjustment reflecting its own productivity outlook, a correctly projected national productivity increase could still be respected. That is, no upward pressure on the price level need arise from labor payments, a fact easily seen from the third identity, which features aggregates.

This preference for microflexibility within the limits of the macroalgebra is not endorsed by the Council of Economic Advisers, which asserted in the 1968 *Economic Report* (p. 124):

> . . . that price stability can be achieved and maintained only to the extent: (1) that increases in hourly compensation generally conform to the average economywide improvement of output per manhour; and (2) that changes in prices in individual sectors generally conform to changes in unit labor costs in those sectors.

These are not really necessary, or unique, conditions for price stability. Besides, Procrustean administration along these lines would not conduce to "efficient allocation of resources," which the Council also seeks through a guideline program (p. 120).

C. To facilitate flexible administration of guidelines, to accommodate diversity in company (and union) behavior (even in the absence of ideal statistics), the future formal program of wage-price surveillance might incorporate certain noncoercive features for dampening inflationary exuberance in the first place. Thus, the writer has proposed elsewhere that non-negotiable "wage-deferment bonds" of guaranteed purchasing power be issued to workers accepting less than the productivity increase set as a national criterion. Furthermore, syndical arrangements by government with labor and business might stipulate avoidance of speculative wage and price adjustments in consideration of the economic stability afforded by active fiscal policy. The coordination of active fiscal policy with "responsible" monetary policy would reinforce this argument. Again, as in the most recent steel industry confrontation (August 1968), the federal government might act energetically and more consistently as a self-interested monopsonist, rather than as a coercive public authority. Finally, an important role must be reserved to education of the nation with regard to guideline relationships, even though such education may nowadays be derided as exhortation, earstroking, or macropreachment.

D. A shift of emphasis in guideline administration to prospective (rather than past or recent) changes in productivity would require no alteration, of course, of the guideline identities. The effectiveness and the probable flexibility of administration, however, would be affected by the ability of appropriate officials to make reliable national productivity forecasts.

Matched Index-Number Formulas: Wages, Prices, and Productivity

The conversion of multiplicative verbal identities into literal algebra is straightforward. The second of the three expressions presented in the preceding section,

$$\text{Average hourly remuneration} \equiv \frac{\text{Payroll}}{\text{Value added}} \times \text{Price X Output per man-hour.}$$

will now be developed into several variant sets of matched index-number formulas, and these formulas will be combined into alternative unique sets.[9]

First, we rewrite the statement in symbols. Thus, we start with $E \equiv R \cdot P \cdot \pi$, where the meaning of the capital letters is obvious.

The next step is to cast this identity into a macrotruism for aggregative index numbers, the numerators and denominators of which have the standard form, $\Sigma rp\pi$, when written without time subscripts (i.e., without 0 for the base period and 1 for any other period). For E, we have a unique expression, $\Sigma r_1 p_1 \pi_1 / \Sigma r_0 p_0 \pi_0$ which may be displayed more conveniently in terms of the time subscripts as 111/000. For R, P, π, however, we do not have unique measures, or even one set of measures. Indeed, six different sets of formulas satisfy the requirements of both verbal and literal algebra:

$$\begin{aligned}
\frac{111}{000} &= \frac{111}{011} \cdot \frac{011}{001} \cdot \frac{001}{000} \\
&= \frac{111}{011} \cdot \frac{010}{000} \cdot \frac{011}{010} \\
&= \frac{101}{001} \cdot \frac{111}{101} \cdot \frac{001}{000} \\
&= \frac{110}{010} \cdot \frac{010}{000} \cdot \frac{111}{110} \\
&= \frac{100}{000} \cdot \frac{110}{100} \cdot \frac{111}{110} \\
&= \frac{100}{000} \cdot \frac{111}{101} \cdot \frac{101}{100}.
\end{aligned}$$

---

[9] The method here employed is discussed at greater length by I. H. Siegel, "A Common Framework for the Index-Number Varieties," *1967 Proceedings of the Business and Economic Statistics Section of the American Statistical Association*, pp. 402-405.

Looking down each column at the right, we see that four distinct aggregative indexes exist for R, for P, and for π. Two of the four are Laspeyres and Paasche analogues, and each of these two occurs twice; the remaining two measures might be called "intermediate" varieties, since they have weights relating to the periods 0 and 1.

How can we harmonize the six variant sets of measures? One way, which is especially attractive, is to take the sixth root of both sides of the identities. This method treats the macrovariables symmetrically. Besides, the result for each macrovariable is a geometric mean—a generalized Fisher ideal index.[10] Since we can make each aggregative index an internal mean of relatives (by restricting it to positive terms only), the generalized index for each macrovariable is necessarily an internal mean also.

Other modes of harmonization are less satisfactory; for, although they preserve symmetry, they can lead to external means for the macrovariables. Thus, a second way to adjust begins with the Laspeyres or Paasche variety for each macrovariable and *adds* the same unknown constant to it; this constant is then determined from the identity binding all the macrovariables. The result for each macrovariable turns out to be a generalized Stuvel index.[11] A third way also begins with the Laspeyres or Paasche "kernel" for each macrovariable, but the unknown constant is a *multiplier* instead. Still another adjustment process involves raising the selected kernel indexes to a constant *power*.

Now, we give greater specificity to the symbols. For each product or quasi-product, we suppose that e, r, and π refer to several kinds of workers having different hourly rates; that output is measured net in a value-added sense; that price is measured gross; and that more than one variety of nonfactor input, each having a distinct price, has to be subtracted from gross output. Stripped of time subscripts, the prototype expression for every numerator or denominator may then be written as

---

[10] I.H. Siegel, "The Generalized 'Ideal' Index-Number Formula," *Journal of the American Statistical Association*, December 1945, pp. 520-523.

[11] Siegel, "Common Framework for the Index-Number Varieties."

$$\Sigma \left[\frac{Sme}{pq - SPQ} \cdot p \cdot \frac{\left(q - \frac{SPQ}{p} \right)}{Sm} \right]$$

The letter S designates a sum of items corresponding to a product or quasi-product; it is to be distinguished from Σ, which is used for a grand total. The symbol m stands for man-hours, q for a gross product, p for a gross price, Q for a nonfactor input, and P for a corresponding nonfactor price. All the terms corresponding to r, p, and π are normally positive.

Instead of taking output as net and price as gross, we may switch these two adjectives and make appropriate adjustments in the prototype aggregate. We should note, in this connection, that, for each product or quasi-product, total value added may be written not only as

$$p \left(q - \frac{SPQ}{p} \right) \text{ but also as } q \left(p - \frac{SPQ}{q} \right)$$

Four additional points merit mention as we bring this section to a close:

A. The measure of net product implicit in the index system described two paragraphs earlier resembles, but is not the same as, that identified with the names of Fabricant and Geary (and, apparently, with the names of Svennilson and R. Wilson, too). Indeed, our implicit measure of net product requires less information; it involves, not so-called "double deflation," but deflation by gross price only.

B. An output or productivity measure emerging from three-variable multiplication is more complex than, and need not show the same numerical changes as, the two-variable formula developed at the WPA National Research Project[12] in the 1930s and later used for guiding computations of the U.S. Bureau of Labor Statistics.

C. Any change of terms in a verbal identity leads to a different prototype sum. The magnitudes shown by variant measures for a particular macrovariable can be affected since a change of terms amounts to a change in weighting pattern.

D. The amount of coordinate information required for each product or quasi-product exceeds the usual supply, as this paper has noted throughout.

Matched Index-Number Formulas: Unit Labor Cost

Use of a simpler identity,

$$\text{Payroll} \equiv \text{Unit labor cost} \times \text{Output},$$

as a framework for guideline measurement and administration places a lighter load on the base of coordinated data. It leads to two variant sets of expressions for the microvariables. The payroll index on the left is again assumed to be fixed; and, for each macrovariable on the right, Paasche and Laspeyres varieties emerge. The geometric mean of the two variant sets yields Fisher's ideal indexes for unit labor cost and output.

We may write the verbal identity in symbols as $W \equiv C \cdot Z$ and proceed as before to obtain two sets of structurally articulated formulas. The prototype aggregate is Σcz, and the invariant payroll index is $\Sigma c_1 z_1 / \Sigma c_0 z_0 = 11/00$.

---

[12] H. Magdoff, I.H. Siegel, and M.B. Davis, *Production, Employment, and Productivity in 59 Manufacturing Industries, 1919-36*, WPA National Research Project, Philadelphia, May 1939.

In particular, we may specify that total output is to be measured net; and that all the indexes are to be "condensed" expressions consistent with the more complex formulas derived in the preceding section. The prototype sum, without subscripts, is

$$\Sigma\left[\left(\frac{Sme}{q-\frac{SPQ}{p}}\right)\cdot\left(q-\frac{SPQ}{p}\right)\right]$$

which is obviously equivalent to

$$\Sigma\left[\left(\frac{Sme}{pq-SPQ}\right)\cdot p\cdot\left(q-\frac{SPQ}{p}\right)\right]$$

Such consistent formulas, linking two identities, would be especially relevant to efforts to coordinate fiscal policy and monetary policy.

Of course, other identities involving unit labor cost may be adopted as frameworks for the derivation of matched formulas pertinent to guideline administration. For example, we may break output into the product of productivity and man-hours and derive another identity,

Payroll ≡ Unit labor cost X Output per man-hour X Man-hours,

that requires a three-variable prototype aggregate.

Babel, Yes; But Clamor?

This paper has focused on the inadequacy of the present and prospective supply of data and measures for the liberal administration of a future formal guideline program. Whatever the condition of the statistical base, continual, pervasive, and regular wage-price surveillance is likely to be adopted; and, if Procrustean or authoritarian administration proves avoidable, credit will presumably have to go to nonstatistical features of the monitoring system.

Liberal guideline administration would be decisively favored by the availability of projections of: (1) laterally articulated index numbers for all guideline variables that are also (2) modularly compatible for all economic levels down to the individual firm. Such measures are easy to design within the frameworks of verbal or accounting identities especially appropriate to particular settings. Two distinct sets of formulas are illustrated in this paper; and, since variant subsets can always be harmonized, all the guideline variables may be treated equitably. The existence of company measures consistent with indexes for higher levels of aggregation would allow wide variation in the behavior of firms without prejudice to attainment of the macroconditions set for noninflationary national performance.

The measures just described, however, are not implementable with the kind of information now at hand. They require the development and maintenance of a vast base of coordinated atomic data for products and quasi-products; and accomplishment of this task would not only prove prohibitively expensive but also be impeded by formidable conceptual and technical difficulties. Even if the data problem could be resolved successfully, another nasty challenge, only hinted in the preceding paragraph, would have to be met: the reasonably correct projection of guideline indexes at all economic levels (since prospects are more pertinent than history to any serious effort of wage-price stabilization).

Although the existing information system is always being improved, it cannot now provide, and should not be expected routinely in the future to provide, voluminous correlative data compiled on a product or quasi-product basis. Companies should be encouraged to develop such data with the aid of the electronic data-processing equipment to which they nowadays have easy access; but any progress toward an articulated national system depends critically upon determined federal leadership. Advances normally made in the supply of published statistics are incremental, rather than fundamental; the typical gap-filling improvement does not incidentally augment the supply of atomic data capable of combination and recombination in alternative ways to meet the recognized problems of today and the problems of tomorrow that are yet to be defined. Indeed, only correlative atomic data are truly "general-purpose"; the index numbers of output, productivity, wages, and prices that are often called "general-purpose" are misnamed although their proliferation and strengthening should ever be welcomed. Only a vast supply of coordinated atomic information would permit the computation of structurally matched index numbers appropriate to particular contexts and uses. In the absence of such data, the index numbers that have to be used may yield results that are not altogether satisfactory; they can always meet the low-grade requirements of verbal algebra, but the demands of literal algebra are more exacting, and the risk of confusing noise with message is great.

We conclude with a sentence that could have served at the beginning as leitmotiv. Although it comes from a paper presented at a Conference on Research in Income and Wealth in October 1958, it is still timely. Early that year, the *Economic Report of the President* helped to dampen the enthusiasm that was building up in the business community for the official establishment of a numerical beacon that might help to moderate wage demands. The *Report* made its contribution by phrasing the productivity criterion for noninflationary wage increase in terms of prospects (forecasting was then regarded with more of the skepticism it still deserves); and by including an appendix that dwelt on weaknesses of productivity statistics and that offered two private-sector measures not quite in accord with each other. Later, however, in 1962, a numerical beacon was established—a light that failed. Now, as we contemplate a more formal guideline program, the sentence of 1958 still has something to say to all who care about flexible administration:

> So crude are existing quantitative tools compared to the ones required that clamor for more detailed and more complete basic statistics would surely seem as appropriate as the babel of diagnosis and prescription heard throughout the land.[13]

---

[13] See *Output, Input, and Productivity Measurement*, p. 38.

1968

6

The Kerner Commission Report and Economic Policy

Part I

Implications of the Kerner Commission Report for Economic Policy

This statement, organized around three heads, considers some of the remarks, findings, and recommendations of the *Report of the National Advisory Commission on Civil Disorders* (the *Kerner Report*) in the light of the Joint Economic Committee's letter of invitation. The points of departure for my first two sections are the two sentences in the *Report* that refer most explicitly to the Employment Act of 1946; these sentences were cited, though not quoted literally, in the Committee's letter. Following the Committee's lead in one other respect, I have used the commercial edition of the *Report*, energetic promotion of which seems to have relegated the handsomer but tardier official version to obscurity.

At the outset, I should admit to a certain vacillation between two views of the future in the preparation of this state-

---

Prepared statement accompanying oral testimony of June 4, 1968, before the Joint Economic Committee.

ment. The first view, which it is natural to assume and prefer, is that the established order will prove adequate to the stern challenges impending at home and in the international arena. Domestically, according to this view, the task, say, of greatly improving the economic and social status of racial minorities will be resolved more or less satisfactorily, in good enough time. The stresses will be accommodated with flexibility and resilience, and the needed adjustments made without essential impairment of the viability of the Republic. On the contrary, the foundation of popular support would even be strengthened. This is the vision that animates the *Kerner Report:* "to make good the promises of American democracy to all citizens—urban and rural, white and black, Spanish-surname, American Indian, and every minority group" (page 2).

A grim alternative possibility is an extensive breakdown of the sense of community—which would, among other things, prevent balanced pursuit of national objectives at home and abroad. Symptoms pointing to breakdown include not only the flight to suburbs and racial disorders but also outbreaks on the campuses, public-service strikes, and occasional violence in labor-management disputes. If the use of "focused rage" becomes a pervasive practice, the functionality of the nation-state and the national economy would be hobbled drastically. Even if not pervasive but systematic, the practice could introduce significant duress and distortion into the legislative process, the administration of laws, and the allocation of federal funds.

Meaning and Future of the Employment Act

The Commission's first reference to the Employment Act represents the usual sort of simplistic paraphrase, rather than a faithful or studied interpretation, of the 109 words[1] constituting the single sentence of Section 2, the Declaration of Policy. The Commission states:

---

[1] I have counted "self-employment" as one word.

> In the Employment Act of 1946, the United States set a national goal of a useful job at a reasonable wage for all those who wish to work.[2]

The Declaration, however, actually says much more than this, and also much less. If it did not, it could not have gained impressive bipartisan support in 1946, and it might not since have proved so flexible for accommodating greatly different theories and styles of implementation.

The tortured negotiated sentence of Section 2 cautiously circumscribes both the nature and extent of the federal commitment. It does not even mention "full employment," but refers to "maximum employment." It does not obligate the federal government to offer, provide, or guarantee jobs. It says nothing at all about "a reasonable wage," contrary to the Commission's assertion. It does not presume to speak for "the United States" or "to set a national goal" for jobs without regard to the prerogatives and duties of the private sector and of the other layers of government. It does not consider employment as an isolated economic category, and it acknowledges the coexistence of other federal duties. It declares, in short, this "continuing policy and responsibility": With proper attention to other prescribed federal functions and to customary private and nonfederal governmental roles, the federal government is committed (1) to contribute to "conditions under which there will be afforded useful employment opportunities, including self-employment, for those able, willing, and seeking to work" and (2) "to promote maximum employment, production, and purchasing power."

---

[2] *Report of the National Advisory Commission on Civil Disorders* (New York: Bantam Books, 1968), p. 414.

A return, from time to time, to the language maze of Section 2 would supply a wholesome reminder that the Act serves better as a potential master framework for coordinating public and private economic policy than as an absolute, unequivocal federal pledge to maximize employment. Despite differences in circumstances and emphasis, the various Councils of Economic Advisers have sought, or have been forced to discover, more or less balanced blends of economic objectives. Indeed, a Council has to assume, or is soon obliged to acknowledge, the curvature of the economic space in which we live. Exclusive or zealous concentration on maximum employment, for example, would soon lead to troublesome readings in some other economic dimensions, such as prices and the international balance of payments. Pursuit instead of, say, a good record for price stability might too soon entail an intolerably high unemployment rate.

A cursory review of the *Economic Reports* of the various presidents makes it clear that the legislative charter has, indeed, been broadly construed. In his valedictory *Report,* President Truman listed three purposes of the Employment Act, the first of which was to provide a framework for public and private collaboration toward common economic ends. The other two were also more general than employment maximization—"to prevent depressions" and to signify a national resolve to maintain "a full and growing economy."[3]

The *Reports* of the Eisenhower years that followed reflected a keen and persistent concern for the stabilization of prices and international payments. In the valedictory Eisenhower *Report,* as in the penultimate one, it was even proposed that the Employment Act be amended "to make reasonable price stability an explicit goal of national economic policy."[4]

---

[3] *Economic Report of the President,* January 1953, pp. 8-11.

The Kennedy-Johnson era has seen a daring test of the range of plausible combinations of readings on the primary economic gauges. The systemic tools of fiscal and monetary policy have been used very actively for the encouragement of growth as the universal solvent of unemployment and other ills. (Growth also brings new problems, of course; and its failure to cure the stubborn residual ailments that it more fully exposes may complicate these ailments by depressing the patient—and his friends and relatives. I return to this matter in the next section.) Specific "structural" remedies were also applied to unemployment; and, by exhortation of labor and management to live according to the productivity principle, an attempt was made to extend the base of policy maneuver provided by the production-cost stability inherited from the late Eisenhower years. (The introduction in 1963 of an annual *Manpower Report of the President,* compatible with the *Economic Report,* illustrates the interest in complementary and coordinated structural attacks on joblessness.) Activism and the expanding impact of Vietnam hostilities have finally produced impressive distortions in commodity and money prices and international payments; and the 1968 *Report,* not so cocky as its predecessors, starkly repeats the lesson of inevitable interdependence of the major economic variables.

If a broad construction of the Act remains generally acceptable in the coming years, what next evolutionary steps seem natural? The antecedent clause echoes my earlier comment on the threats of parochialization and fragmentation of our society, or worse; but it also anticipates that coordinated national economic policy will remain pursuable. Given such a resolution of the strains already evident, we may project a more determined transition from a "mixed" economy toward a "monitored" one, in which "responsible" behavior will be increasingly demanded of individuals and groups wielding strategic economic power. One avenue of development is the reinstitution of guidelines—but guidelines that take account of productivity prospects instead of past trends.

---

[4] Ibid., January 1961, p. 67. Unofficial evidence of the uneasiness felt with regard to the balance of payments in the late Eisenhower years is provided by the following exhibit, a classical *haiku* shared at the time with my colleagues on the staff of the Council of Economic Advisers:

While I sing and splash
In my scented bubble-bath,
Who tugs the golden plug?

A second direction of plausible evolution is the social constraint of private power to set wages and set prices. Syndical arrangements of the federal government with management and labor organizations offer one such approach; these arrangements could be rationalized on the ground that active governmental policy in behalf of growth and sustained demand diminishes the risk element in economic outlook and accordingly warrants diminution of speculative wage and price increases. Perhaps, something like "wage-deferment bonds," which I have proposed elsewhere, will one day find favor; the idea would be to protect workers who accept wage increases within guideline limits against the ravages of inflation attributable to less "responsible" decisionmakers, including government.

A third indicated direction is the harmonization of the older Federal Reserve Act with the newer Employment Act. A common interface for policy becomes evident when the guideline criterion is restated in terms of aggregate output and payrolls (or total incomes). That is, the supply of money and credit should bear some reasonable relationship to the volume of output, which in turn provides a governor for noninflationary total wage (or income) payments.

That pressures for emergency resolution of stubborn residual problems of unemployment will intensify is indicated not only by violent actions and by the general tenor of the *Kerner Report* but also by the findings of two other advisory bodies cited therein. These bodies, engaging in casual pontification, first misstate the import of the Employment Act and then propose concentration on the provision of jobs for particular segments of the population. It is desirable, however, to continue construction of the Act as a broad-spectrum charter for the balanced pursuit of economic policy, with a heavy accent on employment. The Act should not be used as a mandate for crash programs relating to jobs. The primary task of resolving, say, hard-core unemployment in urban centers should be left to new special-purpose laws and to the more determined administration of existing special-purpose laws. Successful implementation of the Employment Act can, of course, provide a favorable setting for such governmental endeavors.

The summary volume issued in February 1966 by the National Commission on Technology, Automation, and Economic Progress illustrates the danger of casual pontification, especially when good channels of public communication are available. In advocating federal sponsorship of "public-service employment," a proposal echoed by the Kerner Commission, the Technology Commission asserted that "we take seriously the commitment of the Employment Act of 1946 to provide 'useful employment opportunities for all those able, willing, and seeking to work.' " Words such as "provide" and "promises" certainly go far beyond the description of the federal job role written into the Act; and the term "recommitting" is gratuitous or disingenuous.[5]

---

[5] *Technology and the American Economy,* Vol. I, February 1966, pp. 35, 37. The quotation from the Act on page 35 incorrectly includes the word "all"; the one on page 37 incorrectly includes the words "all of."

In addition to the notion of "recommitment," we find frequent reference in both popular and technical literature to the "Full Employment Act of 1946"—a misnomer. Both

The second body cited by, and obviously having some influence on, the *Kerner Report* is the President's National Advisory Commission on Rural Poverty. Findings issued in September 1967 recommend "that the Federal Government take more vigorous action to reach the goals of the Employment Act of 1946." This recommendation, strangely, is followed by a rare verbatim reproduction of the Declaration of Policy, which the Rural Poverty Commission "endorses" without any printed evidence of an actual reading. After stating that the "goals" of the Act "have not yet been reached" (inasmuch as "millions of Americans are unemployed or underemployed," even in the absence of recession), the Rural Poverty Commission makes this remarkable proposal:

> The Federal Government, in cooperation with the States, should initiate comprehensive social planning, setting forth concrete goals to be attained by specified target dates.

Indeed,

> It should be definite public policy to reduce the national unemployment rate from its current level near 4 percent to the lowest possible fractional rate of unemployment, as rapidly as feasible.

Brave and sage exhortation is then given to show the attendant difficulties of such a program. Without directly criticizing the Council of Economic Advisers, this prestigious body comprised essentially of noneconomists advises that "monetary and fiscal policies must be used in a timely manner," that "recession must be avoided," that "excessive inflation should also be avoided," and that "a more equitable and humane economic policy must be achieved."[6]

---

of these common errors are repeated in a recent "Call to Americans of Goodwill" that demands of the Congress, among other things, "immediate creation of at least one million socially useful career jobs in public service" (*New York Times*, June 3, 1968).

6. On this paragraph, see *The People Left Behind*, A Report by the President's National Advisory Commission on Rural Poverty (Washington: September 1967), pp. 18-19.

In concluding this section, I cite another seemingly authoritative statement that tends to encourage misunderstanding of the Act, to support its conversion from a comprehensive framework for economic policy into a mere basis for extreme unemployment proposals. At a meeting in December 1967, the Executive Director of the Rural Poverty Commission said:

> The Commission calls upon the Federal Government to fulfill literally the language of the Employment Act of 1946. Specifically, the Commission recommends that the U.S. Government stand ready to provide jobs at the national minimum wage to every unemployed person willing and able to work.[7]

Contrary to the implication of the first quoted sentence, a "literal" implementation of the Declaration of Policy would necessarily be balanced and hedged, rather than simplistic and misleadingly "straightforward." Furthermore, the recommendation contained in the second quoted sentence is offered as though it logically follows from a supposedly correct reinterpretation of the Declaration. Even in the Rural Poverty Commission's report, however, this recommendation (on "guaranteed employment") is separate from the recommendation concerning "vigorous" enforcement of the Employment Act, mentioned in our preceding paragraph.[8]

Has the Employment Act Failed?

The second sentence in the *Kerner Report* that refers to the Employment Act also deserves comment. Coupling the Act with federal measures explicitly referring to manpower improvement, the sentence renders an unduly pessimistic verdict:

---

[7] *National Growth and Its Distribution*, Report of a Symposium on "Communities of Tomorrow," December 11-12, 1967, U.S. Department of Agriculture (Washington: April 1968), p. 45.

[8] See the third recommendation of the Commission on Rural Poverty in *People Left Behind*, p. 19.

> Despite these [federal] efforts [at manpower development and training], and despite sustained general economic prosperity and growing skill demands of automated industry, the goal of full employment has become increasingly hard to attain.[9]

This evaluation is not warranted by facts presented in the *Kerner Report* and by other available statistics. Actually, substantial advances in employment levels and substantial reductions in unemployment rates have been recorded in recent years in spite of the large numbers of new labor force entrants, the sizable rural Negro inmigration into the cities, extensive industrial relocation and merger, and changes in productivity, technology, and tastes. Nonwhites, furthermore, have shared in the improvement although their economic situation is still generally desperate.

The statistics cited by the Commission after the sentence quoted above refer to current status, rather than to time trends. They show national unemployment at about 2 million (the correct figure is somewhat larger), underemployment at about 10 million, hard-core unemployment in the central cities at 500,000, and unemployment rates among younger slum residents at several times the national percentage for the entire labor force.

These and other status figures cited elsewhere in the *Kerner Report* cannot prove that "the goal of full employment" imputed to the Act "has become increasingly hard to attain." However "maximum" or "full" employment is defined, the implicit unemployment target must remain well above zero percent—as high, perhaps, as 3 percent, representing about 2.35 million of the persons in the current civilian labor force. The persistence of such numbers seems almost inevitable for an economic order like ours. Much of this unemployment is transitional and may not require heroic or new remedial measures. Public policy, on the other hand, does not dismiss a "small" residual unemployment percentage as inconsequential. It has also recognized increasingly that the concentration of unemployment according to race, sex, age, or location merits attention even if the group affected is not sizable.

---

[9] *Report of National Advisory Commission on Civil Disorders*, p. 414.

Figures that do show economic improvement over time for nonwhites are scattered throughout the *Kerner Report.* On page 253, for example, it is observed that "unemployment rates among Negroes have declined from a postwar high of 12.6 percent in 1958 to 8.2 percent in 1967." In the same place, an important status figure is mentioned: "Among married Negro men, the unemployment rate for 1967 is 3.2 percent." (If these were stabler times, one might optimistically observe that this was the rate for all married males in the labor force in 1963, and that the rate for the latter has since fallen to about 1.6 percent.) On page 282, it is noted that "the proportion of nonwhites employed in white-collar, technical, and professional jobs has risen from 10.2 percent in 1950 to 20.8 percent in 1966, and the proportion attending college has risen an equal amount." In the same place, mention is made of the growth of a Negro middle class—but only as an additional irritant, alas, to the increasingly alienated Negro have-nots.

What about the future? Only two pages before the sentence about the Employment Act, the *Kerner Report* sounds almost reassuring that we are on the right track with respect to corrective measures (page 412):

> Much has been accomplished in recent years to formulate new directions for national policy and

> new channels for national emergency. Resources devoted to social programs have been greatly increased in many areas. Hence, few of our program suggestions are entirely novel. In some form, many are already in effect.
>
> All this serves to underscore our basic conclusion: the need is not so much for the government to design new programs as it is for the nation to generate new will.

The "new will" would presumably manifest itself in the voting of larger federal funds (for which Vietnam requirements now compete), in improved coordination of programs (within and between governmental layers) for more efficient service, and in increasing involvement of business firms and foundations in urban revitalization (the establishment of the Urban Coalition and the National Alliance of Businessmen is acknowledged on page 418).

Statistics and program information not included in the *Kerner Report* also gainsay the verdict rendered in the second quoted sentence on the Employment Act. A Census tabulation, for example, shows a reduction in the absolute number of nonwhites below the poverty line between 1959 and 1966 as well as a decline in the corresponding percentage—from 54.6 to 41.4. On the whole, however, whites have fared much better than nonwhites; their percentage below the poverty line was 18.0 for 1959 and 11.8 for 1966. (Nevertheless, absolute figures for 1966 show that penury remains a widespread blight; 20.1 million whites and 9.6 million nonwhites were still below the poverty line.)[10]

---

10. U.S. Bureau of the Census, "Income in 1966 of Families and Persons in the United States," *Current Population Report*, P-60, No. 53, December 28, 1967. Table H.

A newer *Current Population Report*, "The Extent of Poverty in the United States: 1959 to 1968," P-60, No. 54, May 31, 1968, presents the same figures, as well as other pertinent information.

The latest *Manpower Report of the President* should also be mentioned. It, too, offers statistical evidence of advance by nonwhites in various aspects of employment and unemployment—as well as evidence, of course, of egregious failures (e.g., to reduce teenage unemployment) and of persisting and pervasive economic afflictions. The document is of interest here, however, for two additional reasons.

One reason is that both the President's prefatory Manpower Message to the Congress (January 23, 1968) and the Secretary of Labor's introduction point to the long term gains made during the regime of the Employment Act. Over the years, the focus of attention has shifted from the gross *national* problems of moderating recession and of sustaining and increasing total employment toward *regional* problems of economic improvement and now toward problems confronting specific *categories* of individuals. The "remaining targets" that command federal attention, the Secretary notes, include the hard-core unemployed, the seasonally unemployed, youths between school and work, inactive older workers, racial minorities, and the jobless handicapped.

The second reason that the *Manpower Report* is of interest here is its description of federal programs directed at these "remaining targets" and presumably responsive to the *Kerner Report.* For example, it discusses JOBS (Job Opportunities in the Business Sector), a government-industry "partnership" for training and hiring the hard-core unemployed. It also discusses the National Alliance of Businessmen (but I do not see the acronym, NAB!). It describes CEP (Concentrated Employment Program) and CAMPS (Cooperative Area Manpower Planning System), which potentially meet the need mentioned in the *Kerner Report* for interagency and intergovernmental coordination of manpower and related services (including manpower services provided under the emerging Model Cities Program).

The Secretary of Labor confidently reports that "we now have the knowledge," acquired through experience under various programs, to help the hard-core unemployed.[11]

The President and the Secretary of Labor should not be expected to proclaim costs and setbacks as loudly as they proclaim successes, but it is fair to observe that the progress made during the era of the Employment Act has itself helped to exacerbate the disappointments widely felt over persisting minority misery. Though hampered by expansion of Vietnam hostilities, by inflation, and by the gold drain, active fiscal and monetary policy has contributed very substantially to the reduction of national unemployment drag. But there are feedbacks: Active fiscal policy has itself contributed to our inflationary and balance-of-payments difficulties—and to monetary and other distortions that have not yet registered their full social costs. It is true, besides, that the start and stall of a well-advertised "war on poverty" in a "great society" have helped to generate and also to frustrate a "revolution of rising expectations." What I want to point up here, however, is that a clearer revelation of disparity of status adds fuel to such a revolution—as the *Kerner Report* noted. The stubborn remaining problems of joblessness and low-grade employment in our society have been exposed to easier view against a background of increasing general affluence. The evils existed before, and solid historical improvement has also been achieved; but they now stand more fully revealed and are amplified, repeated, and dramatized in our entertainment and news media. The obvious ubiquitous signs of unequal economic and social status have a psychological effect which apparently cannot be matched by the citation of any record of historical improvement.

The noncorrespondence between evidence of historic gain and the fact of current despair is poignantly reflected in some recent remarks by the President. In a speech in Chicago on April 24, he rightly observed:

---

[11] On this paragraph and the two preceding ones, see *Manpower Report of the President*, April 1968, *passim*.

> Our society still bears burdens and scars from times before we were born. But we have acted to relieve those burdens and to heal those wounds. Nowhere else—in no other society on this earth, are so many so devoted to leaving this earth better than they found it. It is this purpose that is throbbing through this Republic now.

On May 20, he said the following in a speech in New York:

> To me, the fact that we recognize a gap between achievements and expectations represents a symptom of health, a sign of self-renewal, a sign that our prosperous nation has not succumbed to complacency and self-indulgency.

The temper of these comments accords with the outlook of the *Kerner Report*, even though the *Report*'s treatment of the past and present may well discourage the average white reader—and the nonwhite reader, too.

The difference between history and status, between objective and psychological facts, should still matter to any social "scientist" even if he is committed to activism. It is not necessary to accept the verdict that the Employment Act has more or less reached its limits, that the economic and social gap between whites and nonwhites can no longer be narrowed significantly through the job route. Despite propaganda against which no profession is proof, work is likely to remain a vital category of human activity in the future, either in our own society or in any stable successor. Work has not been rendered vestigial or ceremonial by automation, cybernation, or any other barbarism of the new lexicon; it remains important for personal dignity and political cohesion as well as for economic production. An outmoded materialistic concept that does not die identifies production with manufacturing and similar processes only; but service production has for many decades been definitionally and otherwise respectable, and it is destined to continue its impressive expansion as an employer. The link, in short, between work and income does not need to be severed; and a social scientist can still look forward to as long and honorable a career in studying employment as in sponsoring guaranteed incomes.

Kerner Commission Employment Recommendations

Work, especially in a nonmenial job with a future, is deemed vital by the Kerner Commission for counteracting poverty and unrest in the ghetto. In the chapter on recommendations, the *Report* says (page 413):

> Unemployment and underemployment are among the persistent and serious grievances of disadvantaged minorities. The pervasive effect of these conditions on the racial ghetto is inextricably linked to the problem of civil disorder.

Furthermore, in supporting a national program of income supplements for the needy, the Commission remains mindful of the value of work. The aim should be "to provide for those who can work or who do work, any necessary supplements in such a way as to develop incentives for fuller employment" (page 466).

After describing desirable employment goals and strategies, the *Kerner Report* proposes programs in six areas: (1) consolidation and concentration of efforts to recruit and place workers; (2) removal of barriers to employment and promotion; (3) creation of a million new jobs in the public sector in three years; (4) creation of a million new private jobs in three to five years; (5) economic development of areas of urban and rural poverty; and (6) encouragement of Negro ownership of businesses in the ghetto. Some of the facets of these programs will be mentioned in the course of the discussion that follows.

Although public and private action along the recommended lines is already underway, it may not at all proceed on the scale and at the speed recommended by the Commission. Three reasons suggest themselves: (1) technical difficulties, especially in the accomplishment of an extensive organization or reorganization of manpower services while a vast throughput is also sought; (2) competition of proposed programs with other public and private commitments and objectives; and (3) the slow generation, at best, of a "new will" to resolve decisively the basic problems related to civil disorder. I discuss these points in turn.

The Commission's statement of required "basic strategies" gives some idea of the magnitude of the tasks entailed (page 415):

> Existing programs aimed at recruiting, training and job development should be consolidated according to the function they serve at the local, state, and Federal levels, to avoid fragmentation and duplication.

The *Kerner Report* recalls the difficulty experienced in reorienting the Employment Service. It proposes the creation of a federally chartered corporation to coordinate the job programs for the private sector—"a single cooperative national effort . . .with the assistance of business, labor and industrial leaders at national, regional and local levels" (page 418). This corporation would operate "through regional and local subsidiaries" (page 422). Arrangements would also have to be made "for the flow of trainees from public-sector jobs to on-the-job training in private companies" (page 416). Specially trained supervisors are required for helping the hard-core unemployed through the initial job experience (page 417). While these administrative and logistical tools are themselves being forged, it is proposed that, in the first year, 250,000 of the million public-service jobs be created and 150,000 of the million new private jobs—or 300,000 private jobs if a timely tax credit is enacted. These goals are much more ambitious than those proposed in present government plans.

Additional technical obstacles impede attainment of the *Kerner Report*'s objectives with respect to scale and speed. An employing agency or firm has to define or restructure jobs for the hard-core unemployed and other persons of limited skill, to design career ladders, and smoothly to accommodate these into established work systems. To set up even dead-end jobs and integrate them into established public and private organizations would still require time, skill, and tact. The *Report* notes, furthermore, that "a sure method for motivating the hard-core unemployed has not yet been devised" (page 416). If trainees in new public-service jobs, moreover, are paid "not less than the minimum wage or prevailing wage in the area for similar work, whichever is higher" (page 421), objections could well be raised by unions representing experienced workers; or an impetus would be given to demands by such workers for wage increases to preserve differentials.

What I have just said could serve as the first of my observations on the competition of new employment proposals for the disadvantaged with other private and public commitments and objectives. Private employers, of course, wish and need to make profits, and stockholders expect dividends. More affluent companies can, of course, afford better than the others to pursue social purposes, and they may not need much persuasion to recognize the probable attendant benefits to their public image. Below the federal level, governmental jurisdictions are notorious for reluctance to levy new taxes and to raise debt limits; and many plagued urban areas already have woefully inadequate revenue bases. As for the federal government, new undertakings are discouraged by demands for Vietnam (and other purposes) in a period in which the protection of the value of money and the maintenance of competitiveness in foreign markets are also deemed to be important restraining objectives. Tax credits, recommended by the Kerner Commission for rural development as well as for private job creation, are rarely enacted with enthusiasm; and they will not now be embraced eagerly.

At the beginning of its chapter on recommendations (which cover education, welfare, and housing in addition to employment), the Kerner Commission addresses itself to the nation's fiscal condition and capacity (pages 410-11). It cites two facts as fundamental—the vast productivity of the national economy and the responsiveness of the federal revenue system to economic growth. While acknowledging that the national cornucopia is not inexhaustible and that the allocation of funds among alternative objectives may require hard choices, it does not see an insuperable problem. Despite Vietnam and other demands, we have "enough to make an important start on reducing our critical 'social deficit.' " Indeed, figures cited by the Commission do "demonstrate the dimension of resources—apart from changes in tax rates—which this country can generate." Unfortunately, however, the Commission makes no reference to constraining factors, such as inflationary pressures and the nagging balance-of-payments deficit. Furthermore, the Commission fails to estimate the annual cost of its proposals and to present alternative budgets that also accommodate other major national purposes (including, say, price restraint). If such steps had been taken, the meaning of the *Report* would have been rendered more concrete, and compromise and constructive adjustments would be easier.

A comment is required on public-service jobs. It is a mistake to think only of new low-skill and low-training employment opportunities when we consider the induction of the hard-core unemployed into the world of work. Actually, significant jobs could be provided for a very wide assortment of occupations and at all levels of skill if the various layers of government saw themselves as the logical *employers of first resort,*[12] not last resort, for certain services that the private sector cannot or would not normally supply. These new or expanded services pertain to health, education, antipollution, recreation, police and fire protection, mail delivery, urban development and reconditioning, and many other categories of public interest. Although governments alone are the potential entrepreneurs, they could enlist extensive private participation on a contract basis. These government-operated or government-sponsored undertakings could provide on-the-job training opportunities and career ladders for new workers as well as jobs for better qualified manual, service, office, technical, professional, and managerial employees. But, of course, time would still be required—and a "new will," too—to meet these long-neglected public needs. Thus, "new will" is demonstrably absent to meet perennial, accumulating, public-service requirements in general. The "white society," in short, neglects itself too; it does not tend to neglect the area of the Kerner Commission's primary concern on racist grounds merely.

These references to a "new will" bring me to my third, and final, point. A widespread reading of the *Report* is not likely to generate the public zeal that would assure attainment of the Commission's goals of scale and speed. First, there really is no monolithic, superorganic "white society" that hears, and then decides to honor or to ignore, the Commission's recommendations. The polarization of popular "white" sentiment on what to do, how much, and when is rendered unlikely, furthermore, by the failure of the Commission to draw up a budget accommodating the *Report*'s employment and other objectives with remaining national purposes. (The Secretary of Labor, incidentally, has taken the position—both in the latest *Manpower Report* and in testimony on legislation proposing more ambitious job-creation programs than the Administration favors—that it is up to the people to make known their appraisal of the Commission's recommendations.)[13] Still worse, the *Report* seems to have neglected the opportunity that it had to tap the reservoir of good will already existing in the white majority. This leaves us with an open question: Will activism by racial minorities, will marches and camp-ins, will new disorders supply the moral equivalent of "new will"? This question is seasonal and seasonable.

---

[12] See essay no. 8 in this volume.

Since governmental action as employer of first resort is the key to an important remaining economic frontier, and since the sense of community might be seriously impaired by the adoption and extension of income guarantees that are divorced from work, I see increasing merit in the verbalization of the Beveridgean concept of full employment (i.e., more jobs than seekers) as a social ideal, as an eventual goal, for the United States.

The experience of reading the *Report* (a nonfiction equivalent of *Moby Dick*) gives me the hindsight to have offered the following advice to the Commission if I had been asked in advance about the generation of a "new will" and the movement toward "a true union."

First, the findings ought to have taken explicit account of a need for balanced pursuit of national objectives. Such a pursuit is implicit in the Employment Act; and all other federal legislation concerning manpower, as well as other needs, has to fit into some kind of a plausible whole. The larger-systems approach and cost-effectiveness analysis, of which so much is heard, ought to be applied, even crudely and experimentally, across governmental programs and across periods of time. Alternative trial balances should accordingly have been prepared or commissioned. The problem might have been commended to the Council of Economic Advisers, to such nongovernmental bodies as the National Planning Association (which has a Center for Priority Analysis), and to organizations maintaining econometric models. We should, for example, be able to consider how much inflation would be generated or how much might be tolerated to accommodate the Kerner Commission's recommendations regarding employment, education, welfare, and housing. What are the implications of the recommendations for the end-game in Vietnam? How much constraint on new expenditures for urgent domestic programs is really implicit in our inflationary and balance-of-payments difficulties? Should the tax burden be increased beyond the Presidential request? These are not easy questions; but we do need to progress toward a calculus, however rough, to facilitate national intergroup bargaining on vital issues that could also be settled far less peaceably. We need a calculus of consensus for the engineering of consensus.[14]

---

[13] *Washington Post*, May 10, 1968; and *Manpower Report of the President*, April 1968, p. 10.

Second, as a positive incentive to white men of good will, a timetable should have been established that sets significant yet clearly achievable employment goals for the first year. Correlatively, the *Report* could have encouraged a general understanding that, even with earnest dedication in the white community, the full recommendations respecting employment and other categories are not easy to meet. An auspicious beginning might thus have been assured; a possible contribution to the cycle of overexpectation and overreaction among whites and blacks would also have been avoided. In this connection, the *Report* could have made more of a statement on the "difficulty of really improving the economic status of the Negro man" (pages 255-56):

---

[14] It may soon become technically feasible and publicly useful to interpret Sections 3(a), 4(c), and 5(b) of the Employment Act to require routine annual estimation and revelation of the monetary and manpower implications of alternative (desired or plausible) comprehensive mixes of public and private programs and actions.

> It is far easier to create new jobs than either to create new jobs with relatively high status and earning power, or to upgrade existing employed or partly-employed workers into such better-quality employment. Yet only such upgrading will eliminate the fundamental basis of poverty and deprivation among Negro families.

Finally, if an even conciliatory spirit could not have been maintained in the preparation of the *Report,* more encouragement should still have been offered to the white majority, on which implementation so largely depends. For a journalist writing the introduction to the commercial edition, it may seem a sufficient coup for the Commission to have stated the name of the shame as "white racism." But implementation—that is the thing. The "we" of the *Report* are mostly white; the tainted "white society" and "white institutions" are essentially "the nation" that is being asked "to generate new will" and to move toward "a true union." Would it not, therefore, have been better "strategy" (to use a word appearing so often in the *Report*) to encourage the white majority to don the armor of crusading *concern* than to accept the poisoned shirt of corroding *guilt?* After all, even the establishment of the Commission and the publication of its *Report* must be attributed at least as much to white hope as to black despair.

Part II

Answers to Supplementary Written Questions of Joint Economic Committee

Question No. 1: On page 23 of your statement, you write that "the Commission fails to estimate the annual cost of its proposals and to present alternative budgets that also accommodate other major national purposes (including, say, price restraint)." Don't you think that those are tasks for such organizations as the Upjohn Institute, NPA, and the Joint Economic Committee, rather than the Commission in its report completed under pressing constraints?

Answer to Question No. 1: Part III of the *Kerner Report* has the title "What Can Be Done?" and Chapter 17, contained therein, presents "Recommendations for National Action." The quoted sentence and the succeeding one in my statement refer to an opportunity that was missed (a) to render "more concrete" the proposals made by the Commission in Chapter 17 and (b) to facilitate "compromise and constructive adjustments." The Commission, indeed, accomplished a remarkable amount of work between the end of July 1967, when it was established, and March 1968, when the commercial version of its *Report* appeared; and, in this brief period, the Commission necessarily had to rely heavily on completed and ongoing economic research. As I point out later in my statement, the problem of designing "alternative trial balances" could, nevertheless, "have been commended to the Council of Economic Advisers, to such nongovernmental bodies as the National Planning Association (which has a Center for Priority Analysis), and to organizations maintaining econometric models." From Dr. Colm's testimony, I was pleased to learn that the National Planning Association has already been addressing itself to appraisal, in monetary and manpower terms, of the Commission's recommendations. NPA's existing capability to do so surely owes something to contract support provided by the U.S. Department of Labor under authority of the Manpower Development and Training Act.

Perhaps, as the state of estimating arts improves (or as inhibitions to make projections continue to dissolve), more research groups will engage not only in the construction of alternative trial balances that are useful for compatible and comprehensive policy design but also in the quantification of the manpower implications of different policy mixes. The extensibility of this idea to the implementation of the Employment Act is obvious. The time may soon be right, in other words, to interpret Sections 3(a), 4(c), and 5(b) of the Act as requiring the translation of anticipated or desired total public and private economic performance (including the Administration's legislative program) into coherent sets of financial and manpower accounts.

Question No. 2: I think all of you see a need for extensive public employment to take up the manpower slack. This poses another basic problem. What do we really mean by "job creation"? On the one hand, we know that there are substantial numbers of vacancies. Why can't these be filled from the ranks of the unemployed, in your opinion? Now, on the other hand, it appears to me that many of the jobs that are going begging are very low-paying, low-prestige jobs which the unemployed do not want. How do we resolve this question?

Answer to Question No. 2: Concerning what "we really mean by 'job creation,' " three things should be said:

1. "Job creation" is definable in many ways, but the concept is functionally most significant when it allows for a process of mutual adaptation between (a) the available individuals and (b) the work that potential employers (private and public) want done. With regard to available individuals, the adaptation process may entail enculturation, motivation, basic education, job training, and adequate supervision. With respect to the work to be done, the process may entail the design of jobs having appropriate content or the provision of graded, articulated, job sequences to form career ladders. The adaptation process obviously involves costs, in money

and time; appropriate arrangements for sharing the cost burden, however, often do not exist, and the required time cannot always be spared by needy individuals or by would-be employers.

2. Although our society is regarded as work-oriented, it never has devoted itself as zealously as it should to the creation of jobs for those who want them or ought to have them. Work is important not only for economic purposes but also for political and social cohesion; accordingly, even if work generally becomes less onerous, it remains necessary as a form of "social dues." Since the disjunction of income and work is now being pressed, it becomes increasingly desirable for our society to consider establishing conditions for Beveridgean "full employment" as a more wholesome alternative. According to Beveridge, the full-employment standard requires that there be "always more vacant jobs than unemployed men, not slightly fewer jobs." These jobs should be "at fair wages, of such a kind, and so located that the unemployed men can reasonably be expected to take them."*

3. As we continue to create jobs in the private sector, we also need, in line with the preceding paragraph, a more decisive assumption by government (at all jurisdictional levels) of its rightful role as *employer of first resort.* Enough work, already well described, remains to be done in the public sector to supply amenities for a growing population and to enhance the quality of living. It is not sufficient, however, to talk of the work to be done; this notion of unmet needs has to be transformed into "job creation," into active demand for workers. That

---

*If Lord Beveridge were writing *Full Employment in a Free Society* in 1980 instead of 1944, he would not have confined attention to "men." Similarly, if the *Kerner Report* and my testimony were prepared in 1980, neither would have referred to "Negroes" rather than "blacks."

is, jobs have to be defined, titled, and translated into slots actually to be filled. Funds have to be provided—by additional taxation and, perhaps, by a sharing of federal tax revenues with state and local jurisdictions. If government acts as employer of first resort to satisfy unmet public needs, the created jobs are likely to pay well enough, to carry prestige, to represent a full assortment of skill requirements, to provide career ladders, and to include opportunities for meaningful on-the-job training of the hard-core unemployed, of persons of varying degrees of skill and education, and of teenagers.

Concerning the coexistence of job vacancies and joblessness (or only tenuous and circumscribed attachment to the labor force), two observations are offered:

1. The number of vacant jobs usually reported for a geographic area is smaller than the number of unemployed persons—or of persons who should have jobs, whether or not they actually are in the labor force. (See, for example, *New York Times,* May 6, 1968.) The problem is not simply one of qualitative mismatch.
2. Anomalies may be due not only to racial discrimination but also to numerous other factors—e.g., age or sex discrimination, union barriers, inadequacies of skill and education (or even overeducation), self-image in light of past work history, satisfaction with welfare or unemployment benefits, availability of superior training options, draft status, language difficulty, unsure literacy, health defects, motivation lack, exaggerated expectations, inconvenient job location, transportation cost (money and time), and unattractiveness of pay or working conditions.

To reduce the gap between vacancies and joblessness, we should, as a nation:

1. Move toward the Beveridge concept of full employment as a sounder social alternative to a general attenuation of the link between work and income.
2. Maintain employment incentives (as the *Kerner Report* proposes) in the design of any income-supplementation schemes.
3. Seek determined action by government (at all levels) as *employer of first resort.*
4. Support existing government programs (JOBS, CEP, CAMPS, Model Cities, Neighborhood Youth Corps, Operation Mainstream, New Careers, MDTA training, etc.) and private endeavors (e.g., those of the Urban Coalition and the National Alliance of Businessmen) that seek to improve the employability and employment of racial minorities and that indoctrinate younger slum dwellers in the values of work; and expand or develop such manpower programs in directions indicated in the *Kerner Report.*
5. Improve work prospects of teenagers through better counseling and guidance services in the schools and also, perhaps, through establishment of a "youth wage" below the statutory minimum.
6. Emphasize the cultural adaptation and greater functional literacy of disadvantaged children, as well as the general elevation of their educational attainment.

Question No. 3: What, in your opinion, is the practical minimum unemployment figure that we can use as a target under the Employment Act?

Answer to Question No. 3: In my statement, I referred to 3 percent of the civilian labor force (about 2.3 million persons) as the implicit unemployment target for a society such as ours. This figure may be impracticably low in view of (a) the experienced difficulty of maintaining reasonable price stability as active fiscal and monetary policy pushed unemployment down toward 4 percent in recent years; and (b) structural changes related to the increase in the number of young persons, the greater participation of women in the labor force, and rural-urban migration. On the other hand, improvements in the labor-market performance of racial minorities and teenagers as the result of specific manpower policies would help us to move toward 3 percent. The unemployment rate for married men, largely comprising experienced workers, has fallen to about 1.6 percent; and this low figure offers hope. Finally, we may be able to improve the Phillips curve by two devices I mentioned in my statement: (a) the introduction of wage-deferment bonds and (b) syndical arrangements with labor and management to limit wage and price increases in consideration of the greater stability of employment and income attainable through balanced government policy. (I have to add that, whatever the national unemployment rate, we cannot afford to be complacent if the incidence is high for any fraction of the labor force identifiable by race, sex, age, or location.)

It may be useful to look at the unemployment rate of 3 percent and its absolute equivalent in another way. The number of persons currently reported as unemployed (seasonally unadjusted) is actually not much above my figure of 2.3 million. The challenge may accordingly be restated as one of *maintaining something like our lately realized low national unemployment level while regaining price stability.* Thus restated, the challenge may sound less insuperable.

1968

7

Fuller Employment With Uptrending Prices

The 1968 Economic Report

Some Costs of Effectiveness

The latest *Economic Report of the President* continues to exude a proper pride in the feats of "active discretionary policy," but it also reflects the discomfiture occasioned by some of the attendant costs. Among these costs are the "wage-price spiral" in which the nation is said already to be gripped and a persistent related condition of "inflationary bias." Like the very high cost of money, the threatening gold drain, the nation's weakening competitive position in the world's markets, and the intensifying strains of urban life, these objectionable symptoms cannot be dissociated from the achievements of seven years of sustained economic expansion.

Even before the packaging and promotion of a "new economics," it was widely appreciated that fiscal and monetary policies which were intended to spur growth could foster an updrift of prices as well as gains in employment. This lesson has been taught with varying degrees of

---

Reprinted, with permission, from *Journal of Economic Issues*, Vol. II, No. 1, March 1968.

definiteness and thoroughness by the world's experience with central banking and with expansible paper currencies, by federal efforts before 1961 to assure the supply of both guns and butter, to encourage "reflation," or to stretch out booms, by communist planning, by forced-draft production in fascist or other totalitarian regimes, and by socialistic welfarism supported by "incomes policies." The employment-price connection has also troubled economic thinkers; Keynes[1] visualized it early, and so did many of his British colleagues. In recent years, the relation between the unemployment rate and price advance has become a lively topic for investigation and discussion (especially in terms of "Phillips curves") on both sides of the Atlantic.[2]

The benefits in employment and production claimed for the new activism have helped to conceal, or to divert attention from, its seamy side. The greatest success came with the demonstration, under Democratic auspices, of the magical consequences of implementing a Republican *cliche*: of "letting the people spend more of their own money." In the first flush of euphoria following the 1964 income-tax reduction, an endless vista of additional tax cuts was projected; the national economy had become a widow's cruse of fiscal dividends. But a still newer, or much older, economics soon began to assert its own truths as "exogenous" forces continued to penetrate the boundaries of the imagined "isolated state." The Eisenhower legacy of slack, which apparently contributed a firm base of unit labor cost for the activism of the two subsequent administrations, was eventually used up. The Vietnam cloud has grown much bigger than any man's hand, although the 1968 *Economic Report* gives little notice to the dark shadows now cast everywhere. Nevertheless, the *Report* does acknowledge, and it even insists, that military spending after mid-1965 has added sufficient inflationary pressure to warrant an income-tax rise. Costs and prices have been moving upward, and it is risky to apply effective brakes. The foolish fetishism for gold that was attributed at first to French peasants and to Swiss gnomes has become recognized as a far more pervasive expression of doubt about the soundness of the dollar; and even contemptuous Americans eagerly eye the prices of palladium and platinum futures. The adverse balance of payments has become an unambiguous contraint. Worst of all, although Social Security taxes can still be increased, an income-tax surcharge sought for deliberate dampening of demand has been long delayed by a skeptical Congress. Heraclitus was wrong in believing that the way up and the way down are the same; in Washington, at least, they are not.

---

[1] A cogent reminder that Keynes's *General Theory* proposes a guidelines policy is provided by J.H. Hotson, "Neo-Orthodox Keynesianism and the 45° Heresy," *Nebraska Journal of Economics and Business*, Autumn 1967, pp. 34-49.

[2] A good survey is provided by M.E. Levy, "Full Employment and Inflation: A 'Trade-Off' Analysis," *Conference Board Record*, December 1966, pp. 17-27.

"New standards of economic performance" have emerged, according to the 1968 *Report,* with the demonstration of the power of discretionary policies during the past seven years; but the public may already have gone beyond what the Council has in mind. Consistently high employment has become quickly incorporated into the pattern of expectations; and the attention of people at all income levels focuses on remaining concerns, including the price uptrend, the accompanying hardships and nuisances, the impending dangers. Popular "systems evaluation" easily comprehends both the benefits that appear early and the lagging associated costs, and it may even give undue weight to the latter. Thus, a remark made in the spring of 1967 by a renowned academic economist is more likely to satisfy professional colleagues than to meet the "new standards of economic performance" gaining general support:

> I want to try activism until it is demonstrated that activism is wrong, but I hope the statute of limita-

> tions will keep us from discussing the balance-of-payments aspect of that.[3]

For the economist *engagé*, such a view would nowadays seem irresponsible.

The remainder of this paper is devoted to a brief examination of wage-price issues and policies as presented in the 1968 *Economic Report* and to a restatement of guideline needs for the monitored economy toward which we apparently are heading. For the purpose of this paper, the *Report* includes both of the contributions bound in one volume: the President's message to the Congress, which, strictly, is the *Economic Report of the President,* and the longer, technical supporting document constituting the *Annual Report of the Council of Economic Advisers.* Separation of the reports, reintroduced in the Kennedy Administration, does not always work to the advantage of the economist *qua* professional (or even *qua* politician), especially when circumstances no longer permit him to look like a demiurge. As our comments indicate, the separation also risks creating on occasion, as in 1968, an awkward impression of unequal determination on the part of the President and his advisers.

A Soft Crusade

Though we are caught by the spiraling tail of an inflationary dragon, the 1968 *Economic Report* does not propose heroic counteraction. Executive strategy is directed primarily toward starving the beast, provided that the Congess approves; it relies heavily on fiscal measures, especially an income-tax surcharge that has long been delayed (the new escalation of the Social Security tax, strangely, goes unmentioned). The President will also continue to exhort labor and business not to feed the monster as they have done before and as the Council too readily expects them to keep doing. Furthermore, a new Cabinet Committee on Price Stability is being established to make studies and recommendations, to hold conferences and, generally, to encourage more "responsible" private (and public) decisionmaking.

---

[3] P.A. Samuelson, in A.F. Burns and P.A. Samuelson, *Full Employment, Guideposts and Economic Stability,* Washington, American Enterprise Institute for Public Policy Research, 1967, p. 164.

The two explicit wage-price ingredients of Executive strategy, which are of special interest for this paper, do not promise decisive results. Desirable though it is in a free society to give most authoritative voice to macroeconomic truisms and to urge labor and business to act with restraint, the actual anti-inflationary contribution of exhortation is bound to be minor in a situation like the present one. Unfortunately, the Council of Economic Advisers, which is also prestigious, diminishes the force of the President's statement of resolve by discounting in advance, in its own contribution to the 1968 *Report,* the outcome of appeals for "sacrifice." The same political discretion that must have guided, say, the Council's remarkably limited notice of the deep economic and social implications of Vietnam hostilities could just as well have persuaded the Council toward a more tactful treatment of the probable response of unions to rising living costs and to the rising minimum wage.

As for the second ingredient of explicit wage-price policy, we should not expect too much from a Cabinet Committee on Price Stability in a free economy that is already "overcommitted!" and in which the outstanding structural sources of inflationary bias (even governmental ones) are already well known. The new Committee recalls predecessors of the Eisenhower era; the world then little noted, nor has it long since remembered, what those committees did or even said, and press accounts lauding the establishment of the new Committee have uniformly neglected these precedents (or models?). Of course, since the federal style is now much more activist, it is natural to view even the establishment of a committee as a dynamic step.

The moderateness of the action proposed in the 1968 *Report*, despite the urgency of tone of the many descriptions of the wage-price challenge, reflects an important difference between the newer and older interpretations of the Employment Act. The difficult-to-parse policy declaration that constitutes Section 2 of the Act ends with the words "to promote maximum employment, production, and purchasing power." These are the words to which the new activism largely confines attention, and the goal of "maximum employment" is ranked above the rest. Furthermore, in the pursuit of this goal, the conditioning phrases in the rest of the labored sentence do not seem to be taken as inhibiting. In the 1968 *Report*, the Council states that "high employment of resources—especially manpower—is obviously a top priority," so we have to learn to master, somehow, the accompanying inflationary bias. True, sufficiently restrictive monetary and fiscal policies could halt the advance of wages and prices, but the probable cost in joblessness would be "unacceptably high." The President voices the same thought in the 1968 *Report*: such restrictive policies "would serve the objective of price stability only by sacrificing most of our other key economic objectives."

In contrast, the Eisenhower *Reports*, as may be seen in those for 1960 and 1961, more literally confronted the ambiguities, checks, and balances written into Section 2. They reflected a deep concern for correct partitioning of the "shared responsibility" for economic performance among the various levels of government and between the public and private sectors. Those *Reports* stressed the coordinate importance and the coordinate pursuit of the multiple objectives of the Act; and they even recommended that the Act be amended "to make reasonable price stability an explicit goal of economic policy," although the advertised inflationary hazards of the 1950s had apparently come under control.

Does the moderateness of the wage-price stance of the 1968 *Report* signal a respite in the evolution toward a monitored economy? Not really. The remedies that are prescribed hardly match the seriousness of the diagnosis, but activism may simply have no better medicine to offer for the moment, given the values held by the doctors—and, presumably, the public too. Furthermore, since the *Report* is a politically affected statement that keeps many considerations in view, it surely takes note that 1968 is a year of Presidential election. In the preparation of the 1968 *Report,* account must, therefore, have been taken of the bitterness expressed in the business community on the few earlier occasions of vigorous enforcement of price guidelines. Account must also have been taken of the general abhorrence of "peacetime" wage and price controls, which Congressional catechisms recurrently oblige governmental officials to express. Finally, the future is fraught with grave uncertainties at home and abroad, and exogenous factors may well determine the critical governmental wage-price actions of 1968. Among these factors are the course and the spillovers of the Vietnam conflict and the changing foreign assessments of the strength of the dollar. Activism, it would seem, has come to a standstill—waiting, perhaps, for events to give us a new push, even into the forbidden city of controls.

Darkened Counsel

The President and the Council agree on the importance of restraining wage-price increases in 1968, and they agree that exhortation has a place; but the Council volunteers a pessimistic appraisal of the prospects, thus blunting the impact of the President's own firmness. In the paragraphs that follow, the two positions are outlined.

The Presidential message speaks gravely of this "time for decisions" and of the dangers of temporizing. "In the coming weeks and months," business and labor will have to "behave prudently in setting prices and wages" or "risk an intensified wage-price spiral." Stability, however, cannot be achieved "all at once." The goal is actually longer-range: "reasonable price stability in a steadily growing, high-employment economy." This observation foreshadows the announcement concerning the Cabinet Committee, but the President also has in mind the need for quick tax action "to expand Federal revenues" in the current inflationary context.

In a section of his message on "the return to price stability," the President more explicitly describes stabilization as a "persistent, long-term problem" but repeats that "we must do what we can to minimize price increases in 1968." He describes what constitutes "responsible wage and price behavior" and sketches the mission of the new Cabinet Committee. "I must again," the President declares, "urge—in the strongest terms I know—that unions and business firms exercise the most rigorous restraint in their wage and price determinations in 1968." Indeed, "we must make a *decisive* turn back toward price stability this year"; and, in this connection, he commends adherence to the guideline criteria.

The Council's contribution to the 1968 *Economic Report* contains a whole chapter on "the problem of rising prices." It rejects the "temptation" to dismiss as a "minor inconvenience" the inflationary bias entrained by "minimum unemployment and high utilization of our productive resources." The Council acknowledges that inflation can do "serious and pervasive harm"—that it "impairs economic efficiency, redistributes income capriciously, and weakens the Nation's competiveness in world markets." The Council asserts "the pressing need to re-establish and to maintain price stability," a need to slow the uptrend this year. Indeed, "every effort must be made to slow the rate of price increase in 1968," and wage settlements "appreciably lower" than those of 1967 would be helpful. The Council, like the President, says that government will continue to urge wage-price restraint in 1968; and it recognizes that such restraint will demand "some immediate sacrifices."

So far, so good; but "sacrifices" by whom? Resolution quickly pales. In the very next paragraph, the Council retracts; and, in an *obiter dictum,* it even tends to undercut the President's position. The Council abandons not only the posture just taken but also the posture of 1967, when it refused to sanction supra-productivity wage increases despite the pressure of rising living costs. The Council unneutrally and gratuitously asserts that, in 1968, "it would be patently unrealistic to expect labor to accept increases in money wages which would represent essentially no improvement in real hourly income." After this bit of eclectic realism, the Council reaffirms the productivity principle for noninflationary wage settlements as stated in 1967!

The next remarks of the Council seem reconciled to a long journey back toward price stability. Some day, stability will somehow be reached again, but "only when wage settlements once more conform to the productivity standard, and only when business engages in responsible price-making." This conclusion may be intended as an introduction to the discussion that follows on the Cabinet Committee on Price Stability, but it does not allay the uneasiness already engendered.

The treatment by the Council of the new 14 percent rise in the minimum wage also works against the President's position. This rise, the Council asserts, "will have an even greater impact than did the 1967 increases, which mainly restored the minimum wage to a more typical relationship with the average wage level in the economy." Earlier in the 1968 *Report*, the Council says that the 12 percent advance of 1967 and the extension of coverage exerted "an important influence on both union and nonunion wage increases." In the 1967 *Report*, on the other hand, the Council argued that the rising minimum provided no warrant for a general wage adjustment: that workers in high-wage industries, having already experienced gains, should be content with less-than-average money increases so that low-wage workers might enjoy a rise in real wages. Could not the tenor of this 1967 *obiter dictum* have been adopted in 1968 to support the President's stand?

The Council's 1968 assessment of the minimum wage suggests that consideration ought to have been given to the question of repeal or revision, to counter the unintended inflationary impact. A revision is also suggested by other apparent dysfunctionalities of the rising statutory minimum, such as interference with the goal of higher employment of urban persons with low education and little skill. In this connection, it should be noted that the Council's 1968 chapter on improving the status of the poor claims neither a past nor a prospective beneficial contribution from the rise in minimum wage.

Another embarrassment to the case for early return toward price stability is offered in an inadvertence regarding the expectation of a "moderate" upward drift even in times of slack! For 1961-1965, a period of slack, the Council's contribution to the 1968 *Report* asserts that a rise of 1 to 1.5 percent per year in consumer prices is "not significant," especially "because improvements in quality and the introduction of new goods add to consumption opportunities even when they are not fully reflected in price indexes as reductions in prices." This observation has intriguing and unexplored implications for guideline monitoring, but it is only half an observation. Should we not, in price indexes, also take account of quality declines, of forced uptrading through the disappearance of cheaper (though satisfactory) lines of merchandise, of time losses in shopping (due, say, to crowding or to service deterioration), and of purchases required merely to compensate for degradations of physical and man-made environment?

Obviously, the Council can choose between comment and silence without compromising its professional integrity; and its failure to reinforce more consistently the President's austere position on wage-price stability is highlighted by its discreet forbearance on other matters. Reference has already been made, for example, to the guarded acknowledgment of the Vietnam hostilities in the 1968 *Report.* A less touchy, but very relevant, subject that is neglected altogether in the 1968 *Report* is the retroactive federal pay adjustment enacted in December 1967.[4] This three-step pay adjustment conspicuously violated the guideline principle in 1967 and will do so again in 1968 and in 1969. The first stage provided a 6 percent rise for postal workers and an average rise of 4.5 percent for other civilian personnel. The July 1968 adjustment will amount to 5 percent for postal employees. Since the 1968 and 1969 revisions for other civilian employees will reflect rising scales in private industry, supra-productivity gains should be expected in both instances. It is instructive to contrast the silence of the 1968 *Report* on this major pay adjustment with the fanfare accompanying the revision of federal pay schedules in 1966. To reinforce the guideline principle at that time, the Administration insisted on, and persevered in, limiting the average rise to 2.9 percent for salaries and to 3.2 percent for salaries plus fringe benefits.[5] The monitor clearly needs monitoring for the "responsibility" of his own wage practices in an inflationary period and in the absence of general controls.

---

[4] *Special Analyses: Budget of the United States, Fiscal Year 1969,* p. 74.

[5] John Sheahan, *The Wage-Price Guideposts,* Washington, Brookings Institution, 1967, pp. 54-55.

A New Cabinet Curio

To the Troika and the Quadriad is now added what might be called a Quinquevirate—or, since harmony is to be expected, simply a Quintet. The 1968 *Report* tells of the formation of a Cabinet Committee on Price Stability consisting of the Secretaries of Treasury, Commerce, and Labor, the Budget Director, and the Council Chairman. "As required," other agency heads will participate in the Committee's work, which will be "coordinated" by the Council Chairman and performed with the aid of "a small professional staff."

The mission of the Committee is to help reconcile sustained high employment with reasonable price stability, particularly by focusing governmental efforts on the resolution of "structural problems that impede economic efficiency and contribute to inflation." Five activities are described; they include the making of industry studies, examination of the government's own incongruent policies, enlistment of business-labor-public cooperation, the conduct of conferences, and design of remedial legislation. Regular meetings will be held, and special ones too for urgent problems; but the Committee "will not become involved in specific current wage and price matters."

Although the designation of a group of high-level officials to show a continuing concern for price stability should be welcomed, the ultimate accomplishment of such a group will probably prove disappointing. For one thing, these officials are already fully engaged. For another, the challenge addressed to them is impossibly huge and cannot be met by a small staff within any realistic time frame. Only a piecemeal approach is feasible, rather than a grand redesign. Finally, as we concentrate on the long-run, structural, inflationary bias, we are not certain to be providing the defenses needed against exogenous threats in the current wage-price predicament.

The Cabinet Committee is new, but in a sense it is *déjà vu.* The work cut out for it has been attempted before in peacetime, although on a modest scale. The 1967 *Report* cites heroic efforts by the Council to promote guideline adherence, and these efforts give some idea of the magnitude and complexity of the Committee's task. It is also striking that, during the late Eisenhower years, a high-level instrument of similar name existed: the Cabinet Committee on Price Stability for Economic Growth. The Vice President headed this Committee, and the Council Chairman served as a member. Furthermore, the Council Chairman at that time also participated, along with the Secretary of the Treasury, the Federal Reserve Chairman, and a special Presidential assistant, in "an informal group which discussed problems of financial policy with the President." Archival evidence, if no other, further shows that a Committee on Government Activities Affecting Prices and Costs functioned during the Eisenhower period; and the Council Chairman was again a member. The most important of the Eisenhower policy instruments for the area of interest to us was the Advisory Board on Economic Growth and Stability, established under Reorganization Plan No. 9 of 1953. Headed by the Council Chairman, it had high interagency representation and met regularly (even weekly).[6]

Although these Eisenhower forerunners had very small special staffs, if any, and they flourished, or languished, when Federalism had a lower metabolic rate, they should not be dismissed as irrelevant snow-jobs of yesteryear. They did, like the new Cabinet Committee, have access to a vast and diversified federal apparatus already in being. Their failure to leave teeth marks on our time reflects not only a difference in temperament but also the pluralism of our society, the multiplicity of competing detailed objectives within the federal government itself as well as in the private sector, and the inherent difficulty of engineering deliberate and sizable structural change. An activist disposition is not necessarily decisive, for activism is still the spearhead of one interest and the threat to another. Besides, when many agents of change work on many problems at one time, they soon run into each other; and, as Archimedes made clear, it is necessary to have a place to stand in order to move the world.

---

[6] See for example, *Economic Report of the President, January 1960,* pp. 77-78, and *January 1961,* pp. 73-76.

In any brief list of topics which merit the Committee's attention and are commensurate with its probable resources, the rehabilitation of wage-price guidelines would have to rank high. From the 1968 *Report,* it is clear that a free society has a very limited range of techniques for complementing or replacing systemic ministrations of monetary and fiscal policy in the quest for maximum employment with reasonable price stability. Among these techniques is the monitoring of national wage-price criteria. The rest of this paper concerns the revision of guidelines for containment of the inflationary bias discussed in the 1968 *Report.* Stress is placed on the maintenance of an economic and social milieu that is basically recognizable.

Toward New Guidelines

Another essay in this volume, "Guidelines for the Perplexed," notes the "trend toward permanent Federal wage-price monitoring" and states two needs—to slow this evolution and to channel it, "in any case, in benign directions." These two challenges are related; for, in slowing the change, we should be exercising, preserving, strengthening, and renewing virtues of our political order.

Education (including "exhortation") and emergent experience, rather than force, would have to be assigned dominant roles in the administration of any effective new guidelines program. This is true for any society, but it is especially true for a democratic one that is vigilant to retain its essential character. A new guidelines system is bound to include features antagonistic to the customary freedoms enjoyed by various individuals and groups. The freedoms that are prized at any time can, of course, be changed, replaced, and supplemented; they do not have to be denied, and fundamental freedoms should not be casually or irreversibly degraded. The challenge to education under our democratic aegis is to internalize new social values, to encourage unaccustomed voluntary economic action and restraint in the general interest. Assurance that the government itself is "responsible," that it remains significantly responsive to the public will, would facilitate the task of education. With respect to emergent experience, we should recognize that a heightened fear of formal controls, or another interlude of such controls, might itself contribute to the modification of attitudes, practices, and patterns that now inhibit the effective operation of guidelines.

The 1968 *Report* mentions various advances and needs in the realms of statistics and forecasting, but the requirements of a workable guidelines program for our type of political order remain far from satisfied. Progress is desirable in these realms at the national, industry, and company levels to enhance the vigor of a society committed to the widest practicable diffusion of opportunities for economic decisionmaking. Statistical information and technical knowledge can support not only the more harmonious pursuit of national objectives but also the constructive exploration of diversity at various subordinate levels.

Although voluminous statistics are already available on wages, prices, and productivity, there are still many conspicuous gaps; but, instead of repeating the familiar lacunae, we wish to highlight here the nonexistence of index numbers that are especially appropriate to guidelines administration. The required measures of wages, prices, and productivity would ideally refer to the same scope and be conceptually consistent and algebraically symmetrical. Such compatible measures should be approximated on a product basis for particular companies, industries, economic sectors, and the total economy. The measures might be of the aggregative variety and patterned, say, in accordance with this identity:

$$\text{Hourly earnings} \equiv \text{Prices} \times \text{Output per man-hour} \times (\text{Payrolls} \div \text{Product value}).$$

To assure algebraic symmetry (so that all the economic variables are treated with equal respect), we might then make adjustments that yield generalized Fisher or Stuvel index numbers or some other unbiased variety. Furthermore, "output" should be measured net, and "product value" should refer to value added; and prices should be consistently defined. If such a set of indexes were approximated for the whole economy, the product value would correspond to national income; and the ratio shown in the identity would represent the share of wages in the total income.[7]

Under the best of circumstances, such coordinate indexes could not be computed exactly (for example, because of the obscurity of the "product" of various economic activities, including much of government); but what is striking is the inadequacy of the vast national data base for the derivation of reasonable approximations to the ideal measures. For a serious guidelines effort, consideration should be given to the development of such special-purpose approximations. The data, incidentally, would be applicable to many other uses for which economic information is now compiled. Thus, they would serve such different needs as marketing, input-output analysis, and the construction of superior implicit price deflators for components of the gross national product. If the European interest in value-added taxes spreads to the United States, we may expect an impetus to be given to the compilation of the required data on the company level.

---

[7] Among the writings of I.H. Siegel on the topic of this paragraph are: "On the Design of Consistent Output and Input Indexes for Productivity Measurement," in *Output, Input, and Productivity Measurement*, Studies in Income and Wealth, Vol. 25, Princeton, 1961, pp. 23-41; "Productivity Measures and Forecasts for Employment and Stabilization Policy," included in this volume, and "Systems of Algebraically Consistent Index Numbers," *1965 Proceedings of the Business and Economic Statistics Section of the American Statistical Association*, pp. 369-372.

Projections of the real national product have an important place in active discretionary policy, and they also fit logically into a guidelines program. The productivity that is relevant to the setting of annual wage targets is not an average for some past period but a rate for the *future*. The proper rate may be a trend projection or a nearer-term (say, annual) prospect, and a case could be made for preferring the more conservative figure in such a pair of outlook estimates (if both are positive).[8]

The *Reports* for the years 1962-1968 suggest a single wage-percentage standard corresponding to the national productivity performance; however, variation according to company and industry performance is at least as reasonable and should not be discouraged. Indeed, variation has a sound basis in marginal productivity differences, even for the "same" kinds of workers in different settings and equipped with different amounts of capital. Wage conformity through imitation and through efforts to maintain supposedly customary differentials is not a superior principle which the Cabinet Committee on Price Stability should take for granted or which should escape reconsideration in any new guidelines design. This view is in opposition to the apparent acceptance in the 1968 *Report* of even a minimum-wage rise as a sufficient reason for a general upward movement without regard to productivity.

---

[8] Projected, rather than historical, productivity change is emphasized in "Guidelines for the Perplexed," included in this volume, and also in the last Eisenhower *Reports* (for example, the one for 1958).

The wage-price-productivity connection may be restated in a simple equivalent form, and this alternative discloses important opportunities for public and private policy. The identity shown earlier may be rewritten:

$$\text{Payrolls} \equiv \text{Unit labor cost} \times \text{Output.}$$

Thus, instead of dealing with hourly earnings and productivity, we consider here the totals from which they are derived: payrolls and output. Unit labor cost replaces two other terms in the original identity: price multiplied by the ratio of payrolls to product value. The new version of the identity indicates at once that unit labor cost remains unaltered when payrolls rise at the same rate as output.

Three implications of the restatement should be noted. First, a common handle of macro-policy is provided for the Council and the Federal Reserve. The Council is concerned with the relation of payrolls to output; the Federal Reserve, with the relation of output to the supply of money and credit. A rough master criterion for equilibrating the whole economic system with a view to price stability is thus indicated for the two agencies: Aggregate payrolls, output, and money and credit should advance at reasonably comparable rates. The projected increase in national output is the key figure; the other two figures should be adjusted accordingly.

The second implication is that firms, industries and sectors may easily explore opportunities for variation in micropolicy without jeopardizing the national performance. It is sufficient for each component of the economic system to keep the rise in payrolls within the range of the corresponding projected output. Such behavior would still be compatible with aggregate control of inflationary bias. Furthermore, companies obviously have considerable latitude, at least in principle, to pursue flexible wage administration. The important thing is to have adequate statistical tools.

The third implication relates to these tools. National stabilization with wide micro-variation is achievable even in the absence of the vast supply of statistics required for a more literal monitoring of the wage-price-productivity connection. Leaving price and productivity statistics in their present condition, we could concentrate on the development of output indexes that have unit labor costs as weights. For example, these measures might be aggregative in form; and, for the sake of algebraic neutrality, both the Paasche and Laspeyres variants might be approximated and then combined in a geometric mean according to Fisher's "ideal" formula. This composite measure would also permit the easy derivation, from payrolls, of the Fisher index of unit labor cost. Indeed, we could just as well have stated the minimum new statistical need for a guidelines program in terms of Paasche and Laspeyes indexes of unit labor cost incorporating output weights. Here, as in the earlier treatment of coordinate wage, price, and productivity measurement, we skip discussion of the stubborn technical problems that abound.[9]

To encourage general adherence to the national wage standard, to discourage excessive intercompany variation, and to bolster its own practice and reputation of "responsibility," the government might consider issuance of "wage-deferment bonds."[10] Such federal bonds, non-negotiable and bearing a low rate of interest, would be protected in purchasing power until redemption. If the projected *national* gain in real output or in productivity is *y* percent, a worker who is scheduled for a pay rise of *y* percent or less should be able to elect payment of all or part of his increase in inflation-proof bonds. A worker scheduled for a rise of more than *y* percent would not be eligible for any such protection. Deferral of redemption might be administered for national convenience; thus, heavy cashing might be delayed to times of flagging aggregate demand. In short, an economic incentive is devisable for the reinforcement of exhortation and other kinds of education. If the incentive also proves socially effective, this experience should contribute to subsequent voluntary individual constraint.

---

[9] On technical matters, see I.H. Siegel, *Concepts and Measurement of Production and Productivity*, Washington, U.S. Bureau of Labor Statistics, 1952.

[10] These bonds were proposed in "Guidelines for the Perplexed." They take proper account of cost-of-living changes, whereas proposals to super-add a price adjustment to the productivity factor simply assure the intensification of inflationary pressures.

In difficult shortage areas such as medical and hospital care, the government could improve the poor price record by determined exercise of its monopsony power. It is a large purchaser, and it is a still larger underwriter of public demands for health goods and services.

Total federal behavior in health, education, and some other fields could be made more "responsible" by the establishment of this good rule: Any government program that places heavy demand on skills in short supply should be complemented by a program designed to assure early availability of the needed personnel. This rule would reduce the unfavorable price impacts of popular demand-generating legislation—or change the timing and scope of such legislation. A supply-inducing program should, of course, take account of probable market responses in the absence of federal initiative, the training capabilities of nonfederal sources, and so forth.

We conclude this paper with an acknowledgment that many difficult problems have not been touched and with two additional comments. Attention has not been given, for example, to the thorny issues of wage moderation in the public service industries, including those operated by states and localities. The Cabinet Committee on Price Stability will surely have occasion to ponder the feasibility of, say, measures to reduce crisis bargaining and procedures for obligatory arbitration.

One of the remaining two observations concerns the encouragement of unions and business management to collaborate with active discretionary policy. The pursuit of fuller employment without damaging inflationary accompaniments requires acceptance of this idea by private decisionmakers: The assurance of a climate favorable to continuous high-volume production and near-maximum employment warrants a longer-run outlook in private planning and strategy, and this changed outlook should include reduction of the speculative component of target prices and target wages. The scaling down of such private goals should actually contribute to their more ample fulfillment. This observation is made as a suggestion, rather than as an endorsement of the activist federal policy that has been pursued.

The final observation concerns the danger that various federal decisions may inadvertently increase the persisting problems of structural unemployment against which active discretionary policy constantly butts. Thus, for the 1968 *Report*, the federal decision to reduce the use of railroads for mail transportation is not a matter of importance; for a later *Report*, however, it may well be, as passenger trains are discontinued in increasing number and as certain communities become stranded. We should recall the federal contribution to the distress of Appalachia made by earlier decisions to encourage petroleum production. In this era of sophisticated budgetry, computer-assisted cost-effectiveness evaluation, and active federal policy, an increasing range of speculative inputs should be taken into account by the increasingly burdened creditor of last (and even first) resort.

1967

8

On Manpower, Forecasting, and Public-Private Roles: Three Evolving Concepts

*Nature of Chapter and Book**

This chapter is intended as a setting for the rest of the volume rather than as a systematic summary or synopsis. Having been written last, however, it could, and does, take some account of the papers, discussion, and statements making up the remainder of the book.

Three topics were selected for treatment here, as the chapter title indicates. They are comprehensive enough to subsume much of the content of the book—if the object were indeed to provide a brief survey of the whole. Two of the terms, "manpower" and "forecasting," relate to the central concern of the volume. For this reason and also because their signification and scope are neither standardized nor static, these two terms merit early scrutiny. The third term in the title, "public-private roles," refers to a major environmental factor—to the political and economic institutions, policies,

---

Reprinted from I.H. Siegel, ed., *Manpower Tomorrow: Prospects and Priorities*, Augustus M. Kelley, New York, 1967.

*The references here and below to "chapter," "book," and "volume" are, of course, to the work from which the present essay is reprinted.

and actions that largely shape the manpower outlook. The shift toward public, especially federal, initiative has already registered a substantial impact on the employment and the qualifications of manpower, and it is bound to have even more decisive influence in the future.

The rest of the book is comprised essentially of responses given by different experts to the two questions defining the theme of the Upjohn Institute Conference of October 1966. These questions rather literally provided the focus for the efforts of all the Conference participants—the 6 principal speakers (see Part I), the discussants (Part II), and the more than 40 invitees who complied with a request for advance submission of independent replies (Part III). The wording of the questions was as follows:

> 1. In the next two decades or so (a span equal to the present lifetime of the Institute), what manpower developments, issues, and problems do you expect to emerge or dominate?
>
> 2. Given these prospects, what directions should be taken by the research program of an organization concerned with manpower policy (such as the Upjohn Institute)?

As the remainder of this volume attests, two seemingly simple questions have called for an impressive variety of responses. On first perusal, it is the diversity of the replies that is striking. Manpower forecasts obviously vary, as other forecasts do, in boldness, emphasis, and level of detail. Experts differ in the prospects they delineate, the priorities they propose, and the policies and programs they recommend. Points of similarity and degrees of concurrence among the contributors become apparent, however, on closer study, after the various manners of speaking have been penetrated and after consideration has been given to the omissions as well as to the replies proper.

For several reasons, no attempt at a synthesis of the various contributions is made here. Many of the persons invited to the Conference, after all, are recognized authorities. Besides, a composite or eclectic picture would represent only another, and a competing, view. Furthermore, since a contribution that is slighted or overlooked in what purports to be a synthesis tends thereby to be devalued, it may also be given insufficient attention by the reader. There is a risk in such neglect, for the true anticipatory significance of an expert's opinion does not, of course, depend on the current popularity or degree of acceptance.

Accordingly, not only the Upjohn Institute but also the other organizations and the individuals seeking guidance in research, policy formulation, program design, or administration ought leisurely to make their own discriminating reviews of the total Conference output. They should conduct these reviews from their special standpoints for their special needs. A ready-made sausage or hamburger of consensus would surely please a gourmet much less than the *bifteck hache* suggested to him by the same supply of potential ingredients.

On Manpower

Most of the Conference contributors probably confer on the word "manpower" a much broader meaning than it had in earlier times—say, in World War II, when there was a well-known War Manpower Commission; or in the 1950s, when it became desirable to establish a Scientific Manpower Commission and to begin popularizing a companion word, "womanpower." The treatment in Professor Joseph J. Spengler's Conference paper of the cultural, psychosocial, demographic, and other factors conditioning the manpower outlook makes it clear that the "organism" and the "environment" comprising the "system" are actually difficult to differentiate in this case; that, moreover, even if a sharp discrimination were possible, any serious inquiry into the manpower outlook would necessarily entail inquiry into the larger context also, the conditioning and conditioned "environment."[1] Similarly, Dr. Paul N. Ylvisaker's sensitive survey of the contemporary scene indicates how hard it is, for example, to divorce the urban problems of segregation, alienation, and unemployment from the domestic issues associated with the Vietnam conflict. This speaker did, however, encounter one articulate objector to his counsel for Upjohn Institute to broaden its research sights, as the summary of the proceedings reveals (Part II); and this evidence, as well as the content of various other Conference contributions, explains the qualified phrasing of the topic sentence of this paragraph.

The other principal speakers also exhibited a predilection for the broad view. Thus, Dr. Arthur M. Ross refers in his paper to the goal of "full realization of the human potential," and Mr. Walter P. Reuther talks in a similar vein. At a minimum, this goal embraces development for nonwork and for leisure as well as for paid work. That is, it covers postemployment adjustment, or retirement, and education and training for self-satisfaction throughout life and for the maintenance of long term employability. Dr. Alfred C. Neal, who was sought by the program committee to represent the "business viewpoint" at the Conference directed his whole paper toward education—a minor and wholesome surprise. His definition of education, however, is comprehensive: "not only formal schooling but the lifelong learning process, including training on and off the job." Professor Paul W. McCracken, starting naturally with Section 2 of the Employment Act of 1946, concentrated on the erratic nature of the public monetary and fiscal policies on which the stability of aggregate economic demand so critically depends. It is no wonder, then, that Professor John T. Dunlop, in the statement that he submitted in advance of the Conference, decries the "imperialism" of "manpower policy," which claims jurisdiction over general economic policy and education policy too.

---

[1] Use is made here of terminology due to W.R. Ashby, *Design for a Brain: The Origin of Adaptive Behavior,* 2nd ed., New York, Wiley, 1960, pp. 36-41.

Enlargement of the scope imputed to manpower, to which Dean William Haber's closing comments (Part II) also call attention, is understandable in light of the expansion of federal concern during recent years. In the 1950s, a stern challenge to the security and international prestige of the United States was perceived in Soviet advances in higher education, general economic capability, military prowess, and nuclear and space technology. Part of the response to this challenge is reflected in the National Defense Education Act of 1958, in the substantial increase of federal support for industrial research and development activity, and in other measures taken to strengthen the base of scientific and technical manpower. In the 1960s, the federal commitment widened dramatically with the sudden public confrontation of persisting problems of unemployment, regional distress, urban decay, old age, and poverty; with decisions to pursue space exploration, supersonic transportation, and other beckoning technical opportunities on a substantial scale; and with acknowledgment, in a political and social context restricting the supply of military manpower, that the loss of potential servicemen due to deficiencies in health and education is unconscionably high. A substantial change has evidently occurred within a very short period in the public-private division of responsibility for manpower supply, development, and utilization—a circumstance noted in various Conference contributions and further explored in the final section of this chapter.

The comprehensiveness of the current federal meaning of "manpower," which necessarily influences usage in the nonfederal domain too, is visible, for example, in the Department of Labor's backup document for the April 1967 *Manpower Report of the President.* (Both of these, incidentally, were prepared in accordance with the Manpower Development and Training Act of 1962.) The first sentence of the "Introduction," echoing the phrase used by Dr. Ross, refers to "the fifth year of an active manpower policy—which seeks, as its ultimate goal, to enable every American to realize his full potential and to utilize it fully in his own and the Nation's interest." The objectives of this policy are declared to be three—"developing abilities, creating jobs, and matching workers and jobs." Implementation "has involved action in many fields, including education, training, vocational rehabilitation, area and regional development, placement and other employment services, aids to worker mobility, and removal of discriminatory barriers to employment." It has also involved collaboration with the lower governmental jurisdictions and with nongovernment groups—a matter also treated in the terminal section of this paper.[2]

The Labor Department's supplement to the 1967 *Manpower Report of the President* refers to another term that has become increasingly synonymous with "manpower" in the broad current sense. It restates the federal goal as "fuller utilization of human resources." The words "human resources"—and other related terms, such as "human capital"—have become widely accepted or tolerated in recent years despite their suspicious overtones of serfdom and slavery. The new respectability of these terms is attributable, in part, to the obviously growing federal "investment" in people—even though this "investment" is not evidenced in an altogether satisfactory manner in the national product accounts, the most honored single quantitative register of economic activity. Another reason for rising respectability is more technical: It has recently become fashionable to take professional cognizance of the inability of a crude quantitative measure of labor input and a still less adequate measure of "physical" capital to explain exhaustively the recorded growth of output over the years.[3]

---

[2] The Department of Labor document, bound with the *Manpower Report of the President,* is actually a *Report on Manpower Requirements, Resources, Utilization, and Training* presented by the Secretary to the President in accordance with Section 107 of the 1962 Act, as amended. The references in this paragraph and the next are to p. 1 of this Labor Department report.

At this point, it might be added that a new journal devoted to "human resources" has as its subtitle "Education, Manpower, and Welfare Policies." An editorial note in the first issue makes this observation on the recent interpenetration of traditionally distinct domains:

> When, at the beginning of the decade, the U.S. Department of Labor heralded "The Manpower Revolution of the 1960's," they [*sic*] referred to projected changes in the nation's labor force. As significant as these changes have been, however, the real manpower revolution can be found in two other areas: the unprecedented growth of federal involvement in the fields of education, training, and welfare; and the sharp expansion of research under the general rubric of investment in human resources.[4]

The term "manpower revolution," incidentally, has also been prominently utilized in the title of 10 volumes of wide-ranging hearings generated during the 88th Congress by a subcommittee of the Senate Committee on Labor and Public Welfare.[5]

---

[3] With regard to this paragraph, see a 3-volume report on *Federal Programs for the Development of Human Resources*, Subcommittee on Economic Progress, Joint Economic Committee, 89th Cong., 2d Sess., especially Volume I, pp. 1-86.

[4] *Journal of Human Resources*, Summer 1966, p. 3.

[5] The hearings were held in 1963 (the tenth volume has a 1964 date). The contents of the volumes are listed in *An Index to Hearings on the Nation's Manpower Revolution and to the Publications of the Subcommittee on Employment and Manpower of the Committee on Labor and Public Welfare, United States Senate*, 89th Cong., 1st Sess., 1965.

The foregoing comments indicate the desirability of clarification of the meaning of "manpower"—the establishment of its proper limits with respect to other categories, of its useful subcategories, and so forth. For ordinary speech and for many daily transactions, sharp definition is not at all critical, but greater precision and standardization are needed for the purposes of research, statistics, and law and for a wide variety of communications. "Common sense" and "practicality" tend to condone vague definition; so does pride among professional workers who welcome the recognition of manpower as a worthy research field, who see this recognition as a strategic step toward ultimate reintegration of the social disciplines or even as a gambit toward a new "humanism."

Whether or not a narrow "productionist" construction of manpower is preferable to a broader "consumptionist" orientation is hardly at issue for the moment. The import of what is being said here is that "taxonomy" or "typology" or "systematics" can contribute to the orderly progress and cumulative benefit of manpower research, that these are not dispensable Germanic methodologies best reserved for doctoral dissertations. They can help us, indeed, to make useful distinctions between manpower as "organism" and its multidimensional "environment"; to choose the appropriate microlevels and macrolevels of discourse and analysis; to expose to constant view the shifting interface between work and nonwork; to examine the changing fine-grain structure of work; to identify the many relevant physical and nonphysical dimensions of the environment;[6] to detail the modes, mechanisms, determinants, consequences, and loci of interaction of manpower and the environment.[7]

---

[6] It is easy to overlook the relevance of the foreign-domestic division of the environment when manpower developments and prospects are contemplated. Peaceful international transactions (e.g., the "brain drain" and other migrations) and military stimuli make direct and indirect contributions to labor supply that should not be neglected.

On Forecasting

What has just been said about definition and methodology applies to studies of the manpower outlook as well as to manpower investigations relating to the present or the past. The more distant the forward time horizon, the more plastic do the categories that we distinguish become; and the wider and deeper is the part of the "environment" that obviously influences, and is in turn influenced by, the "organism." The relevant ambient circumstances ought to be given consideration in any attempt at forecasting; and, if little or nothing is said about them, something about them is nevertheless implied.

While some of the contributors did spell out their major assumptions regarding the future environment, others left these conditioning and complementary circumstances unstated. An explicit forecast regarding manpower, however, always involves, willy-nilly, a compatible implicit forecast about virtually everything else. Thus, a minimum of assumption does not mean minimum implication. Of course, the content of the implicit component of a forecast is not necessarily intelligible to the maker, nor need it be fully appreciated by anyone else. The forecaster himself may feel a lesser burden in vaguely implying, rather than definitely foretelling, something about the "environment" of his target of explicit concern.

---

[7] In addition to Professor Dunlop's comments (Part III), cited earlier, see R.J. Lampman, "Toward an Economics of Health, Education, and Welfare," *Journal of Human Resources*, Summer 1966, pp. 45-53. Also pertinent are the remarks of I.H. Siegel with respect to the study of "growth" in *Capital Formation and Economic Growth*, Princeton University Press, 1955, pp. 572-578; and with respect to the study of "technological change" and related concepts in "Conditions of American Technological Progress," *American Economic Review*, May 1954, pp. 161-177, and "Scientific Discovery, Invention, and the Cultural Environment," *Patent, Trademark, and Copyright Journal of Research and Education*, Fall 1960, pp. 233-248. Useful ideas may be found in the discussion of "realms" and "orders" by R.M. MacIver, *Social Causation*, New York, Harper Torchbooks, 1964, pp. 269-290; and of "levels" by Mario Bunge, *The Myth of Simplicity: Problems of Scientific Philosophy*, Englewood Cliffs, Prentice-Hall, 1963, pp. 36-48.

According to the two thematic questions, all the Conference contributions were intended to illuminate the future as far as the 1980s. Differences in personality, philosophical commitment, experience, and so forth found expression in an expected variation of emphasis on elements of continuity and elements of flux. Opposite poles of opinion regarding constancy and change seem to be represented in the Conference comments and the pre-Conference statements of Father Joseph M. Becker and Professor Louis Levine.

On the whole, a "responsible" conservatism and optimism tend to dominate the contributions, although the tone is typically not complacent. "Normal" assumptions are made about the avoidance of major wars or depressions. Dangers already evident or familiar are commonly extrapolated, but they presumably remain manageable or are not regarded as insuperable. Little attention or weight is usually given to possible miscarriages of recommended policies—to their potential for contributing, say, to unintended social breakdown by a transmutation of quantity into quality. These general impressions, however, may reflect a predisposition or bias of the writer, for which the reader will want to supply correctives as he judges the materials for himself in his search through the book for the "goodies" that appeal to him.

Whatever the reader's own conclusion, he should recognize the pressure for "functional optimism" to which the "responsible" forecaster is subject. Measured opinions will usually be given of the future by the expert who has "no axe to grind," who has a scholarly orientation, who is not lobbying for sizable new grants or for political influence. Statements made by him "for the record" are "balanced," keyed to the warrantable, to the plausible. His expressed views may well differ from his intuitive private hunches—from the long shots that cannot be buttressed by professionally respectable argument, that for one reason or another are not confided to the large invisible public. Furthermore, the reality of present and past experience weighs heavily on a reputed expert who agrees to "stick his neck out." Like the inchworm that pokes into the unknown space around him, he remains firmly fastened to the known apple. Were he to assume catastrophic or revolutionary change in the environment as a basis for discussing the manpower future, he might no longer be regarded as responsible; or he might find his audience hopelessly diverted, confused over his failure to grasp what is really important in his own message.

The optimistic bias of responsible forecasting may be partly instinctual, but it also has a rational source and it is reinforced by experience. Forecasts are obviously subject to error and to revision; and, more important, the future itself is subject to influence by deliberate, selective, and timely intervention. Thus, the responsible forecaster's optimism expresses a confidence that has a realistic basis; it is different from, and competitive with, passive complacency. It betokens the forecaster's sense of constructive involvement, direct or vicarious, in the shaping of the common future, his justified belief that objectionable prospects are in some degree correctable or avoidable. Below, more will be said about forecasts that contemplate instrumental intrusion; at this point, we wish only to observe that a sense of participation permits a forthright and clinical acknowledgment of the seamy side of the fabric of our future existence. Challenge, rather than depression, is the spirit appropriate to a reading of, say, Professor Spengler's exposition of 11 determinants of the manpower outlook, the description of welfare enclaves by Dr. Ross, Dr. Ylvisaker's reflections on the cities of the dreadful night, Professor Harry Malisoff's comment on the trials of the urban teacher and student, Mr. Edward A. Robie's and Dr. Walter E. Hoadley's remarks on managerial succession, or Mr. William Papier's appraisal of factors threatening to make government a sink of inefficiency. One can look upon an emerging basilisk and turn to stone; one may instead attempt to slay it.

A few other characteristics of the forecasting art and of the milieu in which it is practiced should be noted. First of all, the world in which we operate as we look ahead is too much with us. It is noisy with misinformation, while also rich in information. In this world, unsure unconventional wisdom coexists with, or can even drive out, doubtful or doubted conventional wisdom. It is not easy to distinguish what is objectively and ascertainably true from what is simply believed or accepted as part of the "data base"; for glamorous journalism now frequently invades, smothers, or displaces serious scholarship. The new interdisciplinary style, furthermore, often has an antidisciplinary first impact and a slow constructive followup; and, in the vacuum of intellectual authority that is created by the first impact, Gresham's law can extend its applicability to the realm of thought.

Language becomes extreme under the influence of journalism and with the collapse of established authority. Any phenomenon or trend may be rated as at least a "revolution"[8] or an "explosion." Exaggerated, half-true, unproved, or unprovable commonplaces can become canonized by repetition. For example, it is widely asserted and accepted, with little or no qualification, that "the pace of technological change is accelerating"; that technology, "automation," and the computer are accomplishing a drastic net "labor displacement" and job "destruction"; that noncommodity employment opportunities are not really "productive" and not as valid economically as outmoded blue-collar tasks; that the "lag between invention and commercial application" is all but disappearing. Many forecasters with professional qualifications, even "responsible" ones who are too impressionable, may be expected to become convinced that their own obsolescence is just around the corner as mechanical brains thrive, cavort, and reproduce.

---

[8] A word about the term "manpower revolution" itself is appropriate here. In the foreword to the report emerging from the 1963 Congressional hearings, it is stated (p. v) that, "in general terms, the revolution may be characterized as a shift from a blue collar to a white collar labor force"; that "this revolution has, of course, been under way for several decades"; and that, "in many respects, the shifts now occurring have been evolutionary, not revolutionary, the logical end results of forces set in motion by the industrial revolution in the 19th century." A correlation of all these ideas suggests that the word "revolution" is not really descriptive but obviously has the shock value of exaggeration. Confusion is add-

Despite mathematical and other technical advances, forecasting remains largely "directional." It is still significantly true that the forecaster faces difficulty in foreseeing not only *what* will happen but also *how much* and *when*. Preventive or early corrective action is hard to take for such reasons, but other practical problems also persist and should not be underestimated. Thus, it is not always clear just what action is most appropriate, and political agreement to take this action cannot always be engineered. Besides, even the action itself has a quantitative aspect that may not be fully understood (how big a "dose" is needed?), and it has a time constraint for application that may be at variance with the time cycle of the decisionmaking machinery. These observations have a bearing on the frequently expressed interest in "early-warning systems" and

---

ed, furthermore, by the reference in the conclusion of the report (p. 103) to the "manpower revolution" as "just in its beginning stages"! (See *Toward Full Employment: Proposals for a Comprehensive Employment and Manpower Policy in the United States*, Subcommittee on Employment and Manpower, Committee on Labor and Public Welfare, U.S. Senate, 88th Cong., 2d Sess., 1964).

information "clearinghouses" for cushioning the employment impact of technological change or plant shutdowns. They also have a bearing on the theory of organization and organizational change, which Professor Rensis Likert and others take up in Part II.

The frustrations just mentioned with respect to the quantitative and timing aspects of future problems and of future remedial actions are often stated in terms of "sabotage" by competing wills and authorities. The idea that "we" know, individually or collectively, just what to do and when, that "we" can "plan rationally" for the future, without serious disappointment, is a very attractive one. Failures in achieving visions have to be charged then to the hostile or ignorant "others": to nature; to foreign nations pursuing their own "short-sighted" objectives; to the anonymous "vested interests" or to identified "power structures" that persevere in stiff-necked or "antisocial" courses, that insist on acting in accordance with their perverse and narrow values and interests.[9]

At this juncture, we should distinguish explicitly the two basically different kinds of forecasts. The more familiar forecasts are presumably made by neutral or disinterested observers. The second kind involves the forecaster as an actor or as an agent, as a person committed to the realization (or to the frustration) of the prospect under consideration. Each of these categories includes varieties that likewise are worthy of professional discrimination and lay notice:

> Within the first main class, two varieties should be differentiated: *prediction* (or *prophecy*), which

---

[9] The Congressional report cited in the preceding footnote observes (p. 21) that "the future is not easily foreseen"; then reassures that "economic knowledge is presently adequate to create employment and manpower policies capable of meeting and adjusting to any future development"; but, alas, pricks the bubble by adding "if only our will is equal to our knowledge." Economic knowledge may not yet be so precise, nor is it the only relevant knowledge nor necessarily the highest knowledge; and the "will" may properly be dulled by other public and private values and interests that compete with concern for full employment and other manpower objectives.

> refers to unequivocal statements about what *will* happen; and *projections,* which refer to conditional (if-then) statements about the future, to the implications of various assumptions that need not be (or may not prove to be) correct. Within the second major category, we distinguish two subdivisions: *programming,* relating to statements that the forecaster or his principal attempts to validate through manipulation of variables under direct control, through use of resources and powers under command; and *propaganda,* relating to statements to be fulfilled through influence on other decision-makers by communication of information or opinion.[10]

As the federal role in the manpower field expands, and as scholars become attracted to the enlarging opportunities to affect grand policy, the second class of forecasts—programming and propaganda—acquires increasing importance. This class is important even now, and it is well represented in blueprints for the future produced and promoted under nongovernmental auspices. Skipping over the vast external literature, we note that Mr. Reuther's paper in this very volume expresses, as desirable prospects for the whole nation, some of the goals of his own union; and these prospects are not expected to come automatically into being without deliberate organizational action and influence. "Our essential challenge over the next years and decades," he declares, on behalf of the larger society, "is not, as the phrase goes, to 'adjust to change' but to direct it, to master it for human ends." He also speaks, in the title of a recent book (by Dennis Gabor), of "inventing the future."

---

[10] See essay no. 10 in this volume; and I.H. Siegel, "Technological Change and Long-Run Forecasting," *Journal of Business,* July 1953, pp. 141-156. For a comprehensive exploration of varieties of forecasts from a different point of view, the reader may wish to consult Bertrand de Jouvenel, *The Art of Conjecture,* New York, Basic Books, 1967.

The feasibility of programming is a fundamental commitment of modern civilization. Rightly or wrongly, today's leaders look, say, to technology for the solution of economic and other human problems, even the problems associated with prior technological achievements. It seems a shame that the honor of giving classic expression to this basic sentiment of the "Western" world-view should fall to Karl Marx, who proclaimed in his *Theses on Feuerbach* (1845) that "philosophers have only *interpreted* the world in various ways, but the real task is to alter it."

On Public-Private Roles

As many Conference participants pointed out, the provision of services looms large in the manpower outlook; and government, especially federal government, will play an expanding direct and supporting role in the development and employment of the required personnel. This growth of the federal economic presence will not, however, represent a simple displacement of other political jurisdictions or of private enterprise. Rather, it will reflect, in the main, the assumption or acquisition of federal responsibility for (a) the definition and supply of *new* widely-felt public needs; and (b) the design and implementation of "higher-systems" approaches that *enlist* the institutions and potentials of state and local governments and the private sector.

Proliferating federal manpower-related policy can be traced back in a literal-minded way to one sufficient ultimate source: the Constitution. Behind the current slogan of "creative federalism" and the superseded one of "partnership," we find stated in the Preamble to the Constitution the enduring resolves to "provide for the common defense" and to "promote the general welfare." What is now called the improvement of "human resources" would be included under the latter aim. Defense has, of course, provided a much less arguable basis for federal policy than welfare over the years; and it has, accordingly, often served as the stronger ground for legislative enactments having a heavy welfare accent. Furthermore, the welfare objective has, until recently, been fostered, as a rule, through improvement of the productive system, rather than by the direct advancement of consumption standards and of the quality of living. With adoption of the Employment Act of 1946, however, a comprehensive master objective, economic "growth," has emerged, and this federal goal embraces both defense and welfare. Changing circumstances, furthermore, have favored in the past few years a franker confrontation of our economic and social inadequacies and a fuller acknowledgment of the claims of consumption in the promotion of the general welfare.[11]

In defining and meeting "*new* widely-felt public needs," the federal government operates on at least two fronts under the welfare banner. Thus, it has to face new challenges in maintaining and improving the climate of domestic economic activity in the spirit of the Employment Act. Conference contributors have referred to many such challenges—e.g., the avoidance of price-wage-productivity distortions, of substantial or uncontrollable inflation, of critical deterioration in the balance of payments, of strikes in the local public services (including government) and other sensitive industries (such as air and rail transport). On the second front, federal activity seeks to reduce the discomforts and blights of urban life, to overcome the disabilities of racial and other discriminations, to depollute and restore the physical environment, to upgrade health care, to strengthen elementary education, to raise the qualifications of workers through training, to enlarge the supply of specialized personnel, and so forth.

---

[11] The preceding two paragraphs are based in part on a paper by I.H. Siegel and Edgar Weinberg on "Technological Change and Public Policy," presented at the 1966 annual meeting of the American Association for the Advancement of Science and summarized in *Technology and Culture*, April 1967, pp. 318-319.

Despite public debate on "demand" and "structure" in relation to unemployment, it is clear that federal action encompasses both. Indeed, "active manpower policy" is addressed to the structural limitations of workers themselves and of their environment, especially the labor market. The stimulation of aggregate economic demand through monetary and fiscal policy cannot dissolve all unemployment, but it provides a setting in which active manpower policy can function more effectively.

While much is said nowadays about possible constructive contributions of the federal government as an employer of "last resort," too little is said about its potential as employer (or financier) of "first resort." In acknowledging the new widely-felt needs that cannot be met in the first instance through private initiative and the conventional market mechanism, the government is actually developing new dimensions, new frontiers, of economic opportunity. However unglamorous, the exploitation of such new areas of service production and employment is just as vital to the future of the country as the conquest of outer space or the sea floor. Despite apocalyptic—or pseudo-utopian—visions of subsidized mass idleness, work is essential to *social* existence and *political* cohesion; and the government has shown increasing interest in underwriting additional worthwhile employment that will also contribute to the continuity of our corporate life. As Mr. Reuther observes, work is a source of dignity, not only of economic sustenance; and Dr. Ross makes the same point. If work disappeared, an early rediscovery would be required to prevent the collapse of civilization—not only "as we have known it" but also any better version.

The federal government cannot, however, "go it alone," and it does not really try. It enlists, as the opening paragraph of this section notes, the participation of other levels of government and of private institutions. Social invention, which has an undeservedly poor reputation, really thrives in this relationship. Thus, in the realm of federal-nonfederal cooperation, the market mechanism is actually utilized very extensively outside the area reserved for political decision; new kinds of organizations (e.g., not-for-profit corporations, state technical-assistance agencies, and community-action agencies) have been founded; new varieties of incentive contracting have been devised; and cost-effectiveness analysis and other managerial tools have been adapted and adopted for the improvement of resource allocation and of general operating efficiency. Bipartisan interest in federal-revenue-sharing and tax-credit schemes suggests that the fiscal basis of intergovernmental partnership is due to be strengthened in the future. This change would permit more effective programming or governmental planning, at least in principle.

In conclusion, we have reason to contemplate the manpower future with confidence—indeed, with *more* confidence as we show *less* complacency. There is reason enough to eschew complacency. As Professor McCracken emphasizes, the record of broad federal—or total-government—economic forecasting and policy leaves much to be desired. It appears, furthermore, that simplistic aggregate fiscal gimmickry may not only prove unavailable and inadequate for spurring general economic activity and maintaining high-level employment but could also interfere with the timely and balanced pursuit of appropriate private objectives and of specific worthy public programs. Whatever the merits ascribable to cost-effectiveness analysis, operations research, and other comprehensive approaches, the proper harmonization of competing public-private, intrapublic, and present-future demands remains a difficult and uncertain business. It is also uncomfortably true that the dreams of "planners," if realized, can become the nightmares of "the people." More could, of course, be said to discourage complacency, but then more would only have to be said to restore confidence in our future collective ability "to promote the general welfare"; and the reader would also be longer prevented from learning how the Conference participants thought this historic objective might be advanced during the next two decades or so in the field of manpower.

1967

9

Guidelines for the Perplexed

Perspective and Setting

A basic assumption of this paper is that wage-price guidelines will, in one form or another, become a feature of our economic order, even if the specific venture begun in 1962 terminates first, perhaps in a whisper rather than a bang. This prospect is here considered to be part of a more general trend—the evolution of our "mixed" economy into a "monitored" one, in which a widening spectrum of erstwhile private behavior will become subject to federal screening for social "responsibility."

Guidelines are not strictly economic, either in conception or execution, so our discussion also touches on noneconomic features of price-wage monitoring that should interest readers as "interdisciplinary" citizens. From the standpoint of citizenship, those aspects of a future monitoring system that are not yet irrevocably fixed or beyond the range of popular influence merit particular attention. Among these aspects are the degree of voluntariness, the explicit legal basis for "informal" controls, the mode of establishing national target figures, and the scope allowed to private deci-

---

This article is the revision of part of a longer paper prepared for presentation at the annual meeting of the Southern Economic Association in Atlanta on November 11, 1966. It was first published in *Journal of Economic Issues*, June 1967.

sionmakers for variation around these targets. Alternatives to guidelines also have to be given due consideration.

The outlines of a monitored economy need not long detain us.[1] In the emerging dispensation, it appears that state and local governments will be much more subservient than they already are to federal initiative and finances, and the balance of power within the federal government will have shifted even more strikingly from the Congress toward the President. This trend is encouraged by the pervasiveness, even the paramountcy, of public concerns for effective national security and for nearly-full employment, toward the achievement of which federal action can make decisive contributions.[2] The scope and scale of technological change, actual and advertised, aggravate both concerns while also providing means for assuaging them. The Declaration of Policy of the Employment Act of 1946 provides a convenient framework for the design and implementation of federal programs pertaining to jobs.

While progress toward the monitored economy is not widely endorsed as such,[3] it is abetted by common attitudes and by innumerable governmental decisions having specific objectives that may seem to be unrelated or even to have an opposite import. When steps are discussed and taken to promote the national safety or the general availability of jobs, it may be natural to assign too little weight to conjectural negative long-run implications and to contemplate the particular intended benefits with too much optimism. Ideological erosion of the two-party system by "me-tooism" in domestic affairs and by bipartisanship in the international sphere is both a cause and effect of the general underappreciation of the adverse concomitants of remedial action. It is both a cause and effect of complacency, consensus, and conformity, and of their identification with the "public interest."

---

[1] For additional remarks, see "Productivity Measures and Forecasts for Employment and Stabilization Policy" included in this volume; and P.B. Kurland, "Guidelines and the Constitution: Some Random Observations on Presidential Power to Control Prices and Wages," in *Guidelines: Informal Controls in the Market Place*, ed. G.P. Shultz and R.Z. Aliber (Chicago: University of Chicago Press, 1966), pp. 209-241.

[2] International threats to our gold supply and to the strength of the dollar could provide a powerful future stimulus to adoption of public wage-price stabilization measures (especially if a satisfactory and timely reorganization of the world monetary system cannot be accomplished).

[3] In the first of his recent Reith lectures, J.K. Galbraith has observed, particularly with reference to the United States, "where faith in free enterprise is one of the minor branches of theology, . . .evolution may well be a better source of socialism than ideological passion." He includes wage and price restraint among the examples of our government's expanding economic role. He emphasizes the "strongly convergent tendencies as between industrial societies . . . despite their very different billing as capitalist or socialist or communist." See *The Listener*, November 17, 1966, pp. 711-714.

If the trend toward a monitored economy is indeed inexorable, the parameters of such an economy are, surely, also plastic. In looking ahead to, say, the 1980s, one need not be resigned to an unhappy rendezvous with destiny in 1984. The future can be invented—or prevented—in some degree, even in the social realm. Those who prefer what is nowadays disparaged as "Puritan ethic" to an inchoate but ominous "American gothic" need not yet despair. As citizens and by legal means, they can act, with some hope of success, to slow the trend toward guideline monitoring (by seeking occasional reversals and detours) and to channel the trend into more benign, and away from less liberal, paths.[4]

The primary focus in this paper on the longer run hardly precludes acknowledgment of the current venture into guideline monitoring and the problems besetting it. Indeed, the present monitoring program is not assumed here to be dying or dead, even though any daily newspaper or weekly magazine so assures us. Accordingly, this paper is intended in part to be responsive to the challenge issued in the spring of 1966 by the Chairman of the Council of Economic Advisers:

---

[4] Economists who missed or do not recall the brief preface to the second edition (1947) of Schumpeter's *Capitalism, Socialism, and Democracy*, New York, Harper, may find it still worth reading.

> If we do not like the current voluntary controls, we need alternatives which are constructive and superior. All of us in government will appreciate your participation in helping us to find them.[5]

Some of the suggestions made below, such as the one to reinforce stabilization guidelines by the issuance of "wage-deferment bonds," are surely pertinent to the present economic context. This, or any other, item shrugged off now as eccentric or impracticable may, nevertheless, contain a useful hint for the later redesign of guidelines. Furthermore, our comments on guidelines and their alternatives may prove helpful even to those who reject the "philosophical" premises.

Ingredients of Strategy

The rest of this paper is concerned with the double social aim of (1) *slowing the trend toward permanent federal price-wage monitoring* and (2) *channeling this trend, in any case, in benign directions.* In addition to the suggestions made below, more general ones are also pertinent, such as reinvigoration of the two-party system, cautious preappraisal of proposed irreversible structural changes in government (for example, a four-year term for House members), encouragement of the concept of states' responsibilities (entailing more adequate non-federal taxation for local needs) alongside the ritualistic insistence on states' rights, rejection of redundant or routine extensions of federal welfarism, vigilant assertion and exercise of Constitutional rights by individuals and organizations in their pursuit of lawful objectives, Congressional insistence on its legislative role and its coordinateness with the Executive, and avoidance of unrealistic or sentimental commitments in the international arena that may be detrimental to the nation's internal cohesiveness and to its other long-run selfish interests.

---

[5] Gardner Ackley, "The Contribution of Guidelines," in *Guidelines: Informal Controls in the Market Place*, p. 78.

Such statements as those above, of course, are easily dismissable as "nonoperational," as stating vague or naive objectives appropriate to a first civics text instead of stating the ways to achieve them. But objectives and perspectives do have to be stated before they can be elucidated, and they are certainly relevant to action. We should consider that even the enthusiastic activism of the cult of economics and politics *a go-go* is not sure of the routes zestfully plotted and of future destinations. Sometimes, as history repeatedly reminds us, it is better just to stand there and think a while than to do something that happens to have been recommended by an itinerant or casual expert; or by a "scholar-tician" privileged to sit for a spell at a console of state and to practice his curiosity at public risk, without a requirement to post a personal performance bond.

The ensuing discussion of wage-price stabilization emphasizes economic competitiveness and decentralization, policy flexibility, and the diffusion of information and understanding as means to slow the progress of wage-price monitorship and to channel it in benign directions. More specifically, five points are treated, the last one in some detail:

> 1. In the assortment of policies considered for stabilization, not only is it desirable to include timely tax increases, prudence in government spending, and the easing of certain supply bottlenecks, but it also seems wise not to rule out categorically the adoption of legislated controls.

2. Government "macropreachment" (Professor Dunlop's striking term),[6] so often disparaged as ineffectual exhortation, is actually an instrument of instruction and leadership that should be used even more energetically to propagate the macro-truisms of wage-price stabilization and thereby to increase public understanding for fuller voluntary compliance. Besides, the government already has economic and other levers it could quietly and fairly manipulate with favorable wage-price effects.

3. Business, labor, and other groups opposed to Procrustean interpretations of guideline targets, to selective and discriminatory enforcement, and to apparent lapses in the "responsibility" of government's own behavior should, within the law, vigorously make their positions known, court broader public support, and exploit the sensitivity of elected and appointed officials to criticism.

4. Deliberate and sustained efforts should be undertaken to (a) improve government statistics on productivity, prices, and wages, (b) enhance general awareness of the limitations of available statistics for stabilization purposes, despite the merits also possessed, and (c) encourage construction of comparable company measures for the support of more independent and better informed private decisionmaking.

5. Many additional adjustments and refinements are required in the determination and administration of guidelines, to assure more effective achievement of technical objectives in an environment that

---

[6] J.T. Dunlop, "Guideposts, Wages, and Collective Bargaining," in *Guidelines*, pp. 81-96.

remains wholesome. This very general statement will be elaborated in the final part of this section.

On Formal Controls. With respect to the first of the five points listed, it is not necessary to stress the importance of choosing from a wide assortment of anti-inflation policies, but it is unfashionable for anyone to offer a kind word nowadays for formal controls. A kind word, however, *is* in order, even though persons of middle age and older seem generally to have concluded, on the basis of experience, that legislated price and wage curbs should be shunned as anathema. Such curbs are not necessarily less effective than the lately favored alternatives of governmental Canutemanship. They are not addressed any more foolishly to symptoms than guidelines are; and neither approach, of course, penetrates deeply into the underlying political and economic causes of inflation.[7] And do not guidelines, even more ludicrously than formal controls, encourage personification of pertinent economic forces, the identification of these forces with "good guys" and "bad guys"? Do they not facilitate overconcentration on the wage-price events of a few industries and companies that supposedly have unbridled market power, while prices rise elsewhere with little notice?

Guidelines may have temporary or local staying effects, and they do have an educational potential not yet effectively developed, but foreign experience with them over a number of years still offers little reassurance for us. In USSR, where guideline principles were well understood in the 1920s and where central planning has from the start been a basic reality of economic life, both exhortation and rigid controls have generally failed to halt impressive price-wage-productivity distortions.[8] Experience in Western Europe, furthermore, does not encourage confidence in the efficacy of guidelines,[9] and the Gilbert-and-Sullivan denouement that is now being enacted in Britain and elsewhere may reinforce earlier doubts.

---

[7] This is a good place to observe that inflation theory, related to guidelines but much broader in scope, still has gaps and lacks organic unity despite a long history of professional and lay preoccupation. See Martin Bronfenbrenner and F.D. Holzman, "A Survey of Inflation," in *Surveys of Economic Theory* (New York: St. Martin's Press, 1965), Vol. 1, pp. 46-107, especially the opening paragraph.

Most important for us, however, is the fact that formal controls, resting on a basis of explicit law, afford certain advantages to aggrieved citizens—and also to the public at large. They do not necessarily prejudice the outlook for the American style—a continuing wide diversity in economic thought and action. We should be impressed that formal controls fit into a vaunted tradition of "laws rather than men," are supposed to be uniformly enforced, and are generally regarded as irksome. The last clause is especially important. Admittedly objectionable, formal controls are more likely to be amended or repudiated as they prove inadequate; and they are also more likely to be repealed when they have served their announced purpose, or when the circumstances that inspired their adoption have essentially changed.

This kind word for legislated controls should not be misconstrued as a recommendation—and surely not as a judgment that their imposition has been warranted in recent circumstances. Rather, this word is offered as a caution against the easy assumption that "whatever is, is right" and adequate, that guidelines once they have been invoked can really contain intense or prolonged inflationary pressure and would naturally be accepted as equitable despite uneven compliance. Living, as we do, in the most possible of all worlds instead of the best possible one, we have too few policy instruments to rule out formal controls in advance.

---

[8] See I.H. Siegel, *Soviet Labor Productivity* (ORO-T-125, Chevy Chase, MD: Johns Hopkins Operations Research Office, 1952), pp. 19-20; and Isaac Deutscher, *Soviet Trade Unions: Their Place in Labour Policy* (London: Royal Institute of International Affairs, 1950), pp. 100-109.

[9] See, for example, J.M. Edelman and R.W. Fleming, *The Politics of Wage-Price Decisions: A Four-Country Analysis* (Urbana: University of Illinois Press, 1965); Economic Council of Canada, *Third Annual Review: Prices, Productivity and Employment* (Ottawa: Queen's Printer, November 1966); and D.C. Smith, *Incomes Policies: Some Foreign Experiences and Their Relevance for Canada* (Ottawa: Queen's Printer, October 1966).

On Exhortation. With respect to the second of our five points, a kind word also seems to be necessary for exhortation. Government, especially democratic government, depends vitally on the verbalization of truths for all, even though these truths may lack obvious handles for all who should care. It is not always appreciated that *every* President who has served since adoption of the Employment Act has had to face the dilemmas of wage-price stabilization and to acknowledge in *Economic Reports* the familiar macroconstraints of noninflationary development.[10] Intellectuals who are glandularly disposed toward activism may be intolerant of "macro-yak" by a nonfavorite president or on certain topics, or in manifestos or books other than their own. What is vaguely called "freedom," however, will certainly last longer, or be displaced less traumatically by a Hegelian variety, if use of the jawbone as an instrument of public instruction keeps a much higher priority than its use as a weapon of force.

This is far from claiming that Executive macropreachment can comprise a total policy. Rather, in helping to slow the decay of contemporary-style "freedom" or to make the impending order more tolerable, exhortation can play an important political and economic role. Monitoring, as we have already seen since 1962, tends to require some hectoring; what begins as earstroking can end as browbeating and even worse. It would be foolish, therefore, to overlook the contribution that macropreachment can make toward establishment of a basis of public understanding of the common necessity, toward creation of the conditions of voluntarism and consent. The internalization of external constraints is certainly a preferable alternative to the open application of government sanctions against a sullen majority or a sizable stiff-necked minority. Internalization is related to puritanism and to creeds held in even lower esteem, such as communism, but it is also the essence of education and enculturation. Men still should raise a standard to which the wise and honest, and the confused, can conceivably repair even if the event is no longer believed to be in the hands of God.

---

[10] Appendix A of *Guidelines: Informal Controls in the Market Place* omits reference to guideline talk in the Truman *Economic Reports* (both annual and midyear).

The probability that methodical macropreachment would reduce the need for stern or ill-tempered administration of guidelines should not be ignored either during the remaining lifetime of the present venture or before any other monitoring effort is formulated. Indeed, it is fair to conjecture: *Whatever the informal controls may have accomplished since 1962 could probably have been accomplished, with the aid of more intensive macropreachment and with fewer dramatic "confrontations," by a system even less formal than the informal guidelines.* Instead of proclaiming and enforcing general price-wage standards, the federal government might do just as well by (1) acting as a self-interested monopsonist and (2) more purposefully using in the broader interest the legal powers it already possesses as a creditor, guarantor, debtor, underwriter, co-financier, or policeman of antitrust. It could quietly face the steel, aluminum, and copper industries and other suppliers as a hard customer. It could influence construction prices by speeding or delaying outlays for deferrable projects. It has a large variety of programs and roles, and it reaches into every significant industry and every geographic area. It could more deliberately, even more "responsibly," affect the supply of, and demand for, the scarcer services (for example, in the health field) and the prices at which they are provided. Serious and sustained advertisement of the price-wage-productivity macro-truisms could meanwhile be contributing to a favorable public climate for labor-management discussions and pricing decisions.

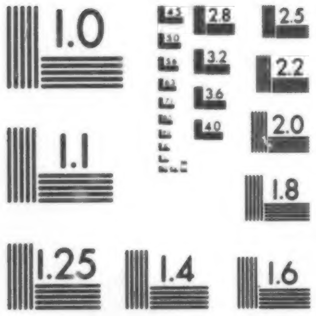
In retrospect, historians of the current guideline venture may, of course, decide that what the preceding paragraph proposes was essentially the strategy that had been pursued. They will see more clearly that the public collisions of government with industry and labor were actually very few. They may record that these collisions had far less decisive effect than the unexciting and hardly publicized day-to-day actions of government and private officials. Can we learn this lesson in advance and use it to slow the transition to a monitored economy or to render that economy more benign?

On Private Vigilance. Our third point refers mainly to the private posture regarding guidelines. (We say "mainly" even though state and local governments do not necessarily have to relax into roles as federal satellites and can still compete meaningfully and appropriately with federal power in service of the public. This possibility should be understood although the word "government" is often used, in this paper as elsewhere, as if the different political jurisdictions really make up a monolithic system, or as if only the federal power is pertinent.) The actions and positions of individuals and organizations can surely influence the shape of a guideline system, affect its administration, and condition its evolution and viability.

The definition of social "responsibility," it is worth remembering, is not yet an exclusive federal prerogative. Private groups so minded can continue to uphold and propagate a concept that tolerates unequal achievement with equal opportunity, that contemplates wide diversity of economic behavior in pursuit of private advantage within a

2

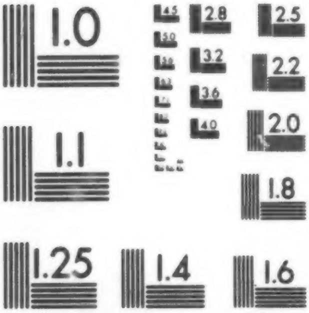
F.Q.


1.0
4.5
5.0
5.6
6.3
2.8
3.2
3.6
4.0
2.5
2.2
2.0
1.1
1.8
1.25
1.4
1.6

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a

2

F.Q.


1.0
4.5
5.0
5.6
6.3
7.1
8.0
2.8
3.2
3.6
4.0
2.5
2.2
2.0
1.1
1.8
1.25
1.4
1.6

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)

framework of evolving law and with due regard to the common weal. Furthermore, government behavior itself still is, and ought to remain, subject to review, criticism, and rebuke by the citizenry; and the standard of "responsibility" applied by "the people" need not be the same as the one fostered by whatever public officials happen to be in charge.

The monitor, in short, can still be monitored, but private economic and political muscles have to be exercised diligently and regularly if atrophy is to be avoided. In particular, private groups may wish to insist on flexibility in wage and price determinations, with bargaining assigned its familiar role though tempered by macropreachment. This flexibility, of course, can prove algebraically compatible with the establishment of, and more uniform adherence to, national norms. Private groups, furthermore, ought to find reassuring the apparent effect of their earlier adverse reactions to jawbone weapon-play in the administration of the current guideline program. Official reliance on jawbone "yak-tion" has obviously become the rule, even though the dramatic exceptions have a lingering psychological impact.

On Statistics and Education. The fourth point relates to needs for information and knowledge (we shall skip T.S. Eliot's third category, wisdom) respecting productivity and other concepts pertinent to wage-price stabilization. The universal tolerance of low-grade "verbal" algebra tends to obscure an unfortunate gap in our statistics: the lack of structurally unbiased index numbers of productivity, wages, and prices meeting the rigorous requirements of "literal" algebra.[11] Such measures are not easy to construct, especially because of their data demands; but how many people interested in guidelines even know about their conceptual relevance and would care about their unavailability? The relatively few technically-informed people are too busy, as a rule, worrying about more conspicuous gaps or theoretical flaws in the supply of relevant statistics; or they are engaged in advocacy and have necessarily accepted for their purposes the information that is at hand; or they believe, or for other reasons may be willing to assure their principals, that available series, including indexes based on crudely deflated aggregates, are good enough as "first approximations" (second ones never seem to be made!) and that variant measures usually yield tolerably similar numbers.

---

[11] See I.H. Siegel, "Systems of Algebraically Consistent Index Numbers," *1965 Proceedings of the Business and Economic Statistics Section of the American Statistical Association*, pp. 369-372.

The general shift of professional interest since the 1930s from microeconomics toward gross economic phenomena, toward national economic accounts, toward other aggregate measures, and toward federal fiscal policy has also tended to deflect attention from needs for better statistical building blocks. If productivity, price, and wage statistics were available for more industries, even if they did not meet the rigorous requirements of "literal" algebra, both government and private decisionmaking would surely be benefited. In principle at least, such information would facilitate average compliance with national price-wage criteria despite deliberate interindustry variation.

The continuing wide diffusion of decisionmaking capability in economic affairs would be favored by the availability not only of more and better industry statistics but also of more and better company indexes. If companies had batteries of measures concerning their own productivity, price, and wage performance, they could make nimbler explorations of the opportunities for wage-bargaining and price-setting around any formulated national targets. If the construction of such measures could also take account of the principles of "literal" algebra, then companies would acquire precision tools for decision.

It may be feared, of course, that the systematic development of company measures would enhance the danger that federal finesse of existing private power to make economic determinations will occur. Our thought, however, is that these statistics would not necessarily be revealed, that they would have the same status as accounting and managerial records normally not published. Even countries that started with central planning have become increasingly interested in the merits of economic decentralization, the workability of which requires the availability of coordinate statistics for different levels of aggregation. Happily, what has been called "planning" in the United States has typically envisaged continuance of a traditional decentralization; and the contribution of company data to the continued diffusion of decision-making power in an economy that improves in total stability has not gone unrecognized.[12]

The outstanding limitations of the national data base for the purposes of price-wage stabilization should be made better known. Indeed, a federally-funded educational program would be worth far more than the trivial cost involved; and it deserves consideration as a government effort together with more systematic and sustained macropreachment. The program should aim at upgrading the sophistication not only of the public at large but also of special groups concerned with wage and price decisions.

Everyone, it seems, wants to be different in the same way, and the custodians of decision and their oracular janissaries do not appear exceptional in this regard. Could it not be made fashionable to acknowledge major data gaps and the theoretical difficulties of meaningful measurement? More attention would then be given by the press, government officials, and business and labor executives to needs for statistical remedy. A more wholesome attitude would develop toward estimation of the direction and magnitude of the difference between preferred measures and computable or available compromises. A desirable enterprise would find encouragement: the construction of at least provisional national measures that are technically more appropriate for the joint and co-equal consideration of productivity, wages, and prices.

---

[12] A statement issued by the National Planning Association just before celebration of the first decade of the Employment Act might be recalled here: "We need better private planning by each group to avoid a centrally directed economy. Better planning must be based on better statistical data and estimates." See Gerhard Colm, ed., *The Employment Act: Past and Future* (Washington, DC, 1956), p. 83. Many companies, of course, have statistical and economic facilities for the guidance of management.

In short, if guidelines seem necessary, an appreciation that the size of the national data base is not a sign of robustness and relevance ought to be promoted. A more energetic quest for improvement of the statistical supply has to include appropriate research on the less tractable problems of concept and measurement and the enhancement of public understanding of the true state of the art. An educational effort would keep fresh the difference between a mistake and a mystique and help us to leaven technicism and quantification with common sense. This effort would seem attractive on cost-effectiveness grounds.

Toward Guideline Improvement.[13] The fifth point, as indicated earlier, will be treated at some length. The suggestions that follow are not at all exhaustive, but they should suffice to indicate the variety of aspects from which the determination and administration of wage-price guidelines might be reexamined, with some advantage to the current exercise and with even more advantage to a future design. Comments already made about statistical needs remain pertinent, but they will not be repeated in this section.

The first suggestion offered under the fifth point is far-reaching in its practical implications: *To consider payment of non-negotiable, low-interest "wage-deferment bonds" as*

---

[13] Based in part on "Productivity Measures and Forecasts for Employment and Stabilization Policy."

government compensation for the inflationary loss of purchasing power sustained by persons whose wage increases in the same year have not exceeded the guideline percentage.[14] This kind of compensation would remedy the injury suffered by the "good guys" at the hands of "bad guys," or suffered through operation of the economic forces that the latter personify; and its availability might also encourage the government to behave more "responsibly" in an inflationary setting. Unlike escalation adjustments in wages for cost of living, the issuance of bonds does not translate immediately into added pressure on prices. Perhaps the term of the bonds or the interest rate could be set so as to defer heavy redemptions to a period of uncertain or declining aggregate economic demand.

Adoption of this idea might reinforce acceptability of another, which is sound in principle but can be implemented only roughly: *To set any annual guideline criterion for wages at the more conservative of two projected figures, one reflecting the year's expected productivity change and the other reflecting the anticipated longer-term (say, five-year average) trend.* For inflation control, of course, projections, especially for the short term, are much more pertinent than the record of past economic performance, which has been emphasized instead in the current guideline venture. For a period in which annual productivity gains are slackening, the availability of wage-deferment bonds would make it easier for unions to accept the more conservative wage adjustment here suggested. (Incidentally, if a productivity decline is projected for a particular year, a zero, rather than negative, wage adjustment would be "conservative.") It might further be suggested that the productivity projections used for guidelines be the same as, or compatible with, the ones used by the Council of Economic Advisers in its other work—say, in anticipating changes in the Gross National Product and the major components thereof.

---

[14] At the Atlanta meeting on November 11, 1966, the author included the alternative of an equivalent income-tax deduction.

Consistent with the preceding two thoughts is the next suggestion under the fifth point: *The government should concede that bargained wage increases may properly go beyond the general wage criterion, but it should also use appropriate means to discourage (a) automatic translation of ultraproductivity wage gains into price increases in the same year and (b) automatic mimicry of such wage gains elsewhere.* In the regime that seeks fuller employment with minimal inflationary leakage, that wishes to avoid formal controls yet achieve the macro-conditions of price-wage stability, that also prizes flexibility in private decisions and variation in results, the discouragement of (*a*) and (*b*) may require additional machinery for discussion and reporting to supplement macropreachment, the use of monopsony and other power, and the issuance of wage-deferment bonds. Macropreachment should be broadened to include insistence on hard bargaining by management; franker acknowledgment of the special difficulties posed by union power and union rivalries; recollection of the relevance of marginal productivity to regional, intercompany, and interindustry pay differentials, even for the "same" work or occupation; and assertion that improvement in the outlook for income security itself warrants moderation in the quest for higher remuneration by business and labor.

Another suggestion under the fifth point is easy to implement, would simplify guideline discussion in general, and would assist administration from the national level down to the company level. It requires: *Restatement of the wage-productivity-price relationship in an algebraically equivalent way that focuses on totals—thus, the percentage payroll rise should be no more rapid than the expected rise in real output.* Such a revision makes clear the wide latitude that exists, not only in the economy at large but also in individual industries and companies, for flexibility within the guidelines. Only the totals have to be kept in balance: hills that pile up in some places should also mean hollows elsewhere. A wage "creep" or "drift" reflecting, say, the transfer or upgrading of employees can be adjusted in the job mix. The grant of an unusually high pay increase to certain classes of workers should mean a more modest average increase for the rest. If part of a payroll rise represents a deliberate cost-of-living adjustment, the same funds cannot, of course, be available for compensation on other grounds in addition—even productivity.

In the reconsideration of guidelines, additional attention should be given (1) to the width of the sector in which productivity performance is relevant and (2) to the scope of the incomes to be covered. As for the width, one may wonder why, say, agriculture should be taken into account as well as the non-agricultural industries in the establishment of a pay-rise criterion intended to apply to only some workers engaged in only a part of the latter sector. As for the scope, perhaps it is desirable *to seek a total "incomes policy," rather than just a wage-moderation policy, stipulating, say, that the rise in total value added, expressed in current dollars, should not exceed the expected gain in real net output.* This standard would emphasize, for example, that since blue-collar workers are not responsible for the total output of a firm, attention should not be confined to their compensation only. Furthermore, if the cost-push mechanism is deemed plausible, then "irresponsible" profit inflation has to receive as much attention when it occurs as "irresponsible" wage inflation does when it is *not* occurring but is only feared. Incidentally, our total-income criterion need not imply a constant division between wage and other income.

Finally, a restatement of the national wage-productivity, or income-productivity, objective in terms of aggregates should facilitate coordination of guideline efforts with other programs that are also intended to keep prices generally stable. Specifically, the restatement below exposes a common policy frontier along which the Council of Economic Advisers, the other Executive agencies, and the Federal Reserve need to cooperate continually. It points toward an all-season, master criterion for countering *both* cost-push and demand-pull inflationary pressures. Thus, avoidance of cost-push inflation requires that payrolls or total factor costs (preferably for the whole economy) rise no faster than the real net output (of the economy or the greater part thereof).[15] Meanwhile, the quantity theory of money, which relates to the classical demand-pull situation, roughly prescribes that the growth of the money supply and the expected gain in real output should remain in balance. The composite policy standard becomes this: *To maintain general price stability by keeping the annual percentage growth in the money supply within the anticipated rate of expansion for real output, which in turn should govern the rate of increase for payrolls or total factor payments (expressed in current dollars).*

With the conclusion of this brief agenda for guideline review, we also bring to a close our exercise in the formulation of a posture toward price-wage monitoring in general. The above discussion has touched on both more formal and less formal alternatives to, and variants of, a guideline program; on the need for government, as well as private, "responsibility" in behavior; and on the key contributions that information and education could make to voluntarism and diversity in private action and to flexibility in administration. Stress has been placed on macropreachment, which ought to become a still more prominent feature of any future continual stabilization effort. The founders of our Republic did not believe in "systems so perfect," according to T.S. Eliot's wonderful line, "that no one will need to be good." It is to be hoped that the next guideline program or any alternative monitoring system will also be conceived in the same tradition of instrumental imperfection and of dependence on the informed and voluntary cooperation of the citizenry for achievement of the common good.

---

[15] Control of cost-push pressures also requires that long-term supply bottlenecks be eased while less fundamental inflation-suppressing remedies are applied. Persistent increases in the cost of services that, year in and year out, figure significantly in the rise of the consumer price index make it harder for workers to accept small pay adjustments in the "public interest."

For a brief recent discussion of the Council-Federal Reserve interface, see John Stark, "Coordination of Monetary Policy: Unfinished Business," *George Washington Law Review* (December 1966), pp. 318-328.

Postscript

The editors have kindly granted an opportunity to add a brief comment acknowledging the latest *Economic Report of the President,* published after this paper was submitted. The 1967 *Report* has some features that are obviously reassuring to the viewpoint here expounded—that the trend toward a monitored economy should be moderated and should also be influenced in favor of the personalistic values still generally prized. Sources of uneasiness, however, remain.

On the positive side, the guideline discussion of 1967 affirms the 1962 objective of education, rather than prescription; reflects a sensitivity to charges, made especially in business circles, of high-handedness and *hubris*; and avoids setting out a new numerical productivity beacon to replace the light that failed. The role of a Greek chorus, rather than economic scenestealer, is reassumed, at least temporarily. A tactic of didactic is adopted—with homely homily, pedestrian pedantry, and even two quotations from the Eisenhower *Reports.*

The major remaining sources of concern can always be reduced to the single one of uncertainty as to which values will be subordinated, denigrated, or jeopardized when the mandate of the Employment Act is vigorously interpreted. The tortured sentence comprising Section 2 of the Act gives a sufficient hint that national objectives may conflict and that the assignment of priorities may properly differ or change. The rules of the economic game no longer seem fixed to the private players once the precedent of strong, but selective, Executive intervention is established.

Equally or more pertinent are the ambiguity of the current position of the professional adviser, the Delphic qualities of the advice he can give in public to his principal, and the indefiniteness of his message to eager readers. The 1967 *Report,* like those for 1962-1966 and unlike those of the early Truman and Eisenhower eras, separately identifies the contribution of the Council from the President's own statement to the Congress. The guideline talk in the professional contribution is discursive, metes out praise and blame in a manner more appropriate to the President himself, is susceptible of excerpting in defense of "irresponsible" behavior, and courts charges of "political" involvement and disingenuousness. Prudence, after all, does temper an adviser's choice of what to talk about in public, how to say it in the presence of millions of listeners, and what to ignore. Could not professional assistance on behalf of informal price-wage stabilization be rendered best if the President's "consultative and advisory body"[16] serves as his "spooksman" rather than spokesman?

---

[16] This term was used by the first triumvirate in describing itself in the *First Annual Report by the Council of Economic Advisers* (*not* the first of the President's annual reports to the Congress), December 1946, pp. 7-8.

1966

10

Productivity Measures and Forecasts for Employment and Stabilization Policy

The Story in Brief

This paper explores certain aspects of the meaning, measurement, supply, quality, and use of productivity statistics in the light of policy requirements concerning employment and wage-price stabilization in our evolving economy. It touches on some of the many conceptual, technical, and practical problems that merit wider attention in our changing environment. Such problems must be appreciated by public and private policymakers and by program administrators as well as by the constructors and various users of productivity measures.

Two points should be made first about the economic context of this paper:

1. The strong interpretation of the Employment Act of 1946 in recent years has already conferred new importance on labor-productivity time series, including forecasts.

Reprinted from Sar A. Levitan and Irving H. Siegel, eds., *Dimensions of Manpower Policy: Programs and Research*, Copyright © 1966, by The Johns Hopkins Press, Baltimore, MD.

2. The recent trend toward strong interpretation is likely to become confirmed as our "mixed" economy continues to shade into a "monitored" one.

With respect to interpretation of the Employment Act, a reminder is needed that the language is heavily qualified and may therefore be read (as it has been by different Economic Advisers to the President) with varying emphasis. The tortuous Teutonic sentence that comprises the Act's Declaration of Policy (Section 2) does provide a federal charter for directing public and private policy toward fuller employment with reasonably stable prices; but the law assumes no unconditional obligation, sets no priorities, and gives no unhedged pledge of jobs. Just before the familiar terminal words, "maximum employment, production, and purchasing power," we find the infinitive "to promote"—rather than, say, "to guarantee." Furthermore, although the law is frequently miscalled the "Full Employment Act," the adjective "full" is nowhere used, and no criterion for "maximum" is offered.

The second of the two points refers to the emerging economic order. In the future, we may expect federal prestige, laws, regulations, and market power to be marshaled still more systematically for the exertion of "countervailing" force. More positive, though selective, use will be made of governmental tools, with due but elastic regard for our democratic traditions, to induce "responsible" private behavior in a widening range of productive activities and business situations.

The discussion that follows suggests several ways in which the productivity information base might be strengthened to assist the future formulation and execution of employment and stabilization policy:

1. Improvement, as opportunities permit, in the scope and quality of the corpus of productivity information for in-

dividual industries, industry combinations, and larger economic sectors.

2. Support of further research into stubborn problems of concept and meaning—including test computations, where feasible, to disclose the direction and magnitude of the difference between (a) preferred measures and (b) the available or derivable ones that have to be used as substitutes.

3. Promotion of the design, construction, and testing of algebraically consistent index numbers that are especially suitable for joint analysis of changes in productivity and other economic variables, such as wages and prices.

4. Encouragement of: (a) experimentation with productivity forecasting, since explicit outlook estimates are often much more appropriate than routine extensions of past trends; and (b) related research efforts to anticipate the nature, extent, and implications of technological and other important changes.

5. Maintenance, insofar as practicable, of "flexible" governmental and public attitudes toward "official" productivity statistics and measurement techniques that cannot qualify as definitive.

6. Stimulation of further company interest in the construction of measures, trends, and forecasts of productivity as well as other variables relating to company operations.

7. Extension, at modest cost in comparison to obtainable benefits, of the education of policymakers, administrators, analysts, the press, and the general public with respect to the character and limitations of available and normally derivable productivity statistics.

This statement of needs neither overlooks nor is intended to disparage past accomplishments in the labor-productivity field; and it does not mean that data outside the immediate realm of productivity measurement are less deserving of continual attention. The lifetime of the Employment Act has indeed been a period of great progress in economic statistics; but productivity work has not been especially favored and its various prunings have hardly been intended to assure robustness. The realm of productivity measurement is aided in some degree, on the other hand, when improvements are made in other statistics that are utilizable in pertinent indirect methods of estimation (e.g., price deflation). But it could be aided much more if significant improvements were made along other lines, as indicated in the preceding seven statements.

The Productivity Nexus

The developing need for more and better labor-productivity tools for policy is clearly reflected in the Employment Act. Productivity, in the present context, means the ratio of production to employment (man-hours or persons, unweighted or weighted in some appropriate way); and these are two of the three variables mentioned in the concluding phrase of the Declaration of Policy, already cited. Productivity also enters into the practical definition of "purchasing power," as the promulgation of explicit "wage-price guideposts" in the 1962 *Economic Report of the President* illustrates. Finally, productivity forecasts have a place in the discharge of the presidential responsibility to report annually the "current and foreseeable trends in the levels of employment, production, and purchasing power" (Section 3).

At this point, a necessary distinction between "verbal" and "literal" algebra should be noted. The mere cancellation of words in such identities as "production≡employment x productivity" or "wages≡unit labor cost x employment x productivity" is not a sufficient criterion for the construction of suitably matched index numbers. Ideally, compatibility in a more "literal" sense—in the detailed data, formulas, and weights—is also required. Since these more exacting requirements can rarely be met, however, it is desirable, at least, to appreciate their nature and the risks involved in substituting an available and seemingly equivalent measure for a preferable but unavailable one.

Though commonly neglected, the distinction between "verbal" and "literal" algebra in index-number measurement is not a technical trifle. Policymakers, administrators, and specialists in nonproductivity fields, even those who consider themselves "practical," ought to know or care that algebraic operations help to determine the meaning and appropriateness of alternative productivity measures, that different plausible sets of operations may lead to significantly different productivity numbers, that different numbers may counsel different decisions, that absence and ignorance of the most suitable alternative productivity measure may foreclose consideration and choice of the most warranted course of action. "Practical" people cannot really afford to rely on the mere names of series, on symbols, and on form, and to show indifference to content.[1]

Uneven Recognition of Needs; Uneven Prospects of Remedy

As our mixed economy progressively becomes a monitored one, in which the federal government exercises a more positive and a wider coordinating role, the creation of more and better productivity statistics and outlook estimates will very probably proceed at a rate that is far less than satisfactory. The expansion in supply and the advance of quality may be much too limited for the demands placed on the national data base. The popularity of macroeconomic series-watching already tends to favor certain broad aggregates and general economic indicators over detailed measures. Easy reliance on these comprehensive measures leads to neglect of their conceptual and technical flaws and their incomplete appropriateness to many of the uses to which they are put. Their apparent adequacy diverts attention from requirements for other pertinent and detailed series, especially building blocks. Indeed, a preoccupation with aggregates and a complacent widespread acceptance of "verbal" algebra may make it appear that buildings no longer have to be built by experts, or with bricks or similar elemental materials, and that, therefore, little need exists for the creation and improvement of such materials and for the careful drafting of specifications and blueprints.

---

[1] For further discussion of "verbal" and "literal" algebra, see three items by I.H. Siegel: *Concepts and Measurement of Production and Productivity* (Washington: U.S. Bureau of Labor Statistics, 1952); "On the Design of Consistent Output and Indexes for Productivity Measurement," in *Output, Input, and Productivity Measurement* (Princeton: Princeton University Press, 1961). pp. 23-41; and "Systems of Algebraically Consistent Index Numbers," *1965 Proceedings of the Business and Economic Statistics Section of the American Statistical Association*, pp. 368-72.

Inattention to the basic shortage of productivity building blocks is easy to document (although some of the more experienced students of economic affairs do occasionally file pointed reminders). It is remarkable that only a few scattered references were made to labor productivity by the individuals, organizations, and users of statistics canvassed in 1965 by the Joint Economic Committee for views on improvements required in the federal information base.[2] The 1967 Budget, furthermore, shows a trivial increase in expenditures for "salaries and expenses" of the Bureau of Labor Statistics for 1966 over 1965 and for 1967 over 1966 "for improved statistics and statistical research on employment and unemployment, wages, prices, and productivity."[3] A related newspaper item reports a proposed "boost" from 30 to 35 or 37 in the number of industries covered by separate productivity indexes of the Bureau.[4] Practically no reference was made to statistical needs with respect to productivity in the papers presented at the symposium celebrating the twentieth aniversary of the Employment Act in February, 1966.

---

[2] U.S., Congress, Joint Economic Committee, *Improved Statistics for Economic Growth*, July 1965.

[3] *The Budget of the United States Government: Fiscal Year Ending June 30, 1967*, p. 299.

Whatever is added to the existing stock of productivity information by federal agencies (including, incidentally, the industry data of the Bureau of the Census) will be most welcome, but the gains will very likely be much too small and come much too late to satisfy any purist. The nature, scope, and rate of progress affecting published industry and sector statistics will doubtless be restricted, as in the past, by technical difficulties of concept and measurement (as in the service industries), by proper differences of opinion among experts as to priorities, by the costs (in time, money, and scarce statistical manpower) of data compilation for new series (especially for making algebraically consistent measures for particular analyses), and by the proliferation of competing demands for available funds. Private organizations, such as the National Bureau of Economic Research, will presumably add to the supply of historical series, but their contribution can hardly prove decisive in view of the growth and diversity of foreseeable needs.

Plentiful opportunities for theoretical, analytical, managerial, and educational advances will be afforded by the challenges of policy to the confined data base. The construction of test measures and projections, the elaboration of econometric models, and the empirical study of production functions could yield some productivity-information bonuses. Additional companies, furthermore, may find sufficient reason to prepare indexes of production, labor input, productivity, and unit labor costs as guides for internal operations and planning,[5] but these indexes will most probably not be published. Individual government agencies will surely expand their measurement programs for managerial purposes too.[6] The stage will be set for a continuing project that merits governmental acceptance on cost-benefit grounds—enhancement of the sophistication of the various classes of users, the press, and the general public with regard to the character, applicability, and pitfalls of available productivity statistics and with regard to the properties of more suitable special-purpose measures (including forecasts).

---

[4] *Wall Street Journal*, February 1, 1966.

The Employment Act has served as a focus for orderly efforts to improve the statistics needed for coordinating public and private policy in the interest of economic expansion with reasonable price stability. In the 1940s and 1950s, "gaps" in productivity and other statistical areas were widely advertised—for example, by the Joint Economic Committee in cooperation with the Bureau of the Budget.[7] In the 1958 *Economic Report of the President,* prepared when the federal economic role was far less activist, a special appendix dealt with problems of productivity measurement. In the 1962 *Report,* which promulgated the wage-price guideposts as informational rather than directive, the limitations of productivity statistics again were frankly addressed. In subsequent *Reports,* as the guideposts acquired doctrinal force, the caveats became muted despite their continuing applicability to available statistical gauges. A mellow restrospective chapter in the 1966 *Report,* reviewing the first two decades of the Act, points to notable improvements, especially in the timely processing of an increasing number of widely used "economic indicators"; but it also notes that "our data are not completely satisfactory" and cites productivity and fringe benefits among the areas "where there are important gaps and weaknesses," remediable "only by expansion of our statistical programs."

---

[5] See, for example, J.W. Kendrick and Daniel Creamer, *Measuring Company Productivity* ("Studies in Business Economics," No. 89; New York: National Industrial Conference Board, 1965).

[6] U.S. Bureau of the Budget, *Measuring Productivity of Federal Government Organizations,* 1964; and its *War on Waste,* December 31, 1964.

[7] *Statistical Gaps,* a Committee Print, was issued in 1948. Also noteworthy are the Joint Economic Committee's *Hearings on Economic Statistics,* 1954, and *Hearings on Employment and Unemployment Statistics,* 1955.

In 1962, a Presidential Commission reported on productivity and other statistical needs expressed to it by the Council of Economic Advisers and other organizations and individuals. An explicit interest in industry series was registered by the Council: "its analyses of . . . economic developments would be greatly aided by better statistics on employment and hours for major industrial sectors, which could be used in conjunction with gross national product and other output estimates to determine shifts in productivity." The Council also "indicated that one of its most urgent statistical needs is for better data on hours worked in all major sectors of the economy as a prerequisite for early and reliable estimates of productivity changes."[8] In the long run, it is to be hoped, even immediate statistical requirements of the Council may be partially accommodated!

In 1965, while the Council still had its old needs for productivity information, it acquired an additional context in which to restate them. A Council member, addressing the Federal Statistics Users Conference at the end of October, noted that "rough, global figures" had proved adequate for public economic policy relating to reduction of the gap between actual and potential employment. Successful reduction, however, rationalized a shift of primary interest to specific spheres in which "we need to strengthen our knowledge substantially"—productivity, as well as prices

---

[8] President's Committee to Appraise Employment and Unemployment Statistics, *Measuring Employment and Unemployment*, 1962, pp. 39 and 94.

(domestic and export), capacity, job vacancies, and fringe benefits.[9]

The Growing Federal Role

What are the pertinent features of the evolving environment in which productivity is assuming new significance, regardless of the state and adequacy of the information at hand? A trend toward a "monitored" economy, even in "peacetime," is indicated by recent domestic events, and also by earlier developments in Great Britain and Western Continental Europe.[10] Emergence of a new pattern, a new "style," is discernible—although detours, inconsistencies, and reversals are also to be expected in the transition from a "mixed" economy, as competitive forces and as the flux of international affairs continue to register their effects.

Two characteristics may be said to differentiate the monitored economy from the mixed economy. In the latter, the central government already demands a sizable share of the national product and already has a wide assortment of powers relating to taxes, money and credit, resource development, welfare, and markets. Thus, it already possesses a capability of influencing private economic decisions significantly and selectively. More important, through impact on both aggregate demand and the supply of critical resources, it can also influence the general tempo of economic activity and the total volume of employment. The monitored economy is distinguished, first, by the use of government prestige and power (in our case, through the presidential office) to define a comprehensive master objective or small cluster of dominant "national goals," to set "targets" relating thereto, and to pursue these aims preferably by the manipulation of available "instrumental variables" and by "exhortation" of the private sector. The second distinguishing characteristic is the governmental disposition to achieve the collaboration deemed essential to the "national interest" or the "public interest" by going *beyond* general exhortation to threats, sanctions, and the mobilization of public sentiment against recalcitrant private groups.

---

[9] See reference to remarks of Otto Eckstein in *The American Statistician*, December 1965, p. 2.

[10] See the various essays in B.G. Hickman (ed.), *Quantitative Planning of Economic Policy* (Washington: Brookings Institution, 1965); and J.M. Edelman and R.W. Fleming, *The Politics of Wage-Price Decisions: A Four-Country Analysis* (Urbana, University of Illinois Press, 1965).

In the monitored economy, formal detailed "planning" is not attempted for society, although quantitative and other simplified forecasting "models" may be used as aids in public and private policy design. Heavy stress continues to be placed there on private initiative and money incentives, and wide latitude remains for freedom of economic choice and action. The national output retains its dominant consumer orientation, at least in "peacetime." Indeed, if the monitored economy is successful in sustaining growth, an extra welfare bonus becomes available to the population through more complete and more continual access to goods and services produced in greater abundance.

While traditional cultural values are strained in the monitored economy, the spine of dominant ideology could remain intact. The changes would tend to be regarded as rational or necessary modifications in the rules of the game in response to new challenges. On the whole, the people may seem, like Macbeth following the dagger, to be marshaled where they were already going. The targets indicate general directions, rather than personal quotas, and gains in material welfare could go far to compensate for any felt deprivation in the realm of intangibles. Projections that are judged desirable are expected to derive a self-fulfilling impetus from the responses of the private sector, and corrective private responses are expected to be induced by the announcement of national prospects regarded as objectionable. In addition, government has to "plan" its own complements to such private responses, which may not be deemed sufficient for attainment of established national targets.

The roots of the emerging U.S. version of the monitored economy are ramified and deep, traceable without exaggeration back to the Constitutional Convention—long before our system even became recognized as "mixed." If specific historical tributaries are to be singled out, first importance must be assigned to the experience and to the threat of wars and recessions—emergencies that fundamentally jeopardize personal and national security, that accordingly provide occasion for the enactment and exercise of extraordinary federal powers, and that also tend to focus and fix federal leadership in the Presidency.[11]

Employment Act as Integrating Framework

The Employment Act of 1946, passed in an atmosphere of concern that the economic sluggishness of the 1930s might return after World War II, provides a handy and "logical" matrix for coordinating federal policies with each other and with those of lower levels of government and the private sector. The turgid single sentence that constitutes the Declaration of Policy is nowadays being interpreted, as already noted, as a charter for strong federal monitorial action rather than as a negotiated baseline of bipartisan unanimity. A reconciliation of the Employment Act and the older Federal Reserve Act, which provides another, but less comprehensive, approach to the same sorts of national goals, remains to be effected in the future. A contribution to this rapprochement is offered at the end of this paper.

---

[11] In recent years, Congressional hearings and the reports of such groups as the President's Commission on National Goals, the Committee for Economic Development's Commission on Money and Credit, the Rockefeller Brothers Fund, the American Assembly, and the National Planning Association have helped to modify professional, business, and public attitudes concerning master objectives and the potentials for government-private cooperation. Earlier contributions have been made, of course, by the *Economic Reports of the President*—and also by the widely advertised concepts of "partnership" and "shared responsibility" of the Eisenhower era, which are forerunners of the current "creative federalism." Precedents were provided before World War II in the reports of the Temporary National Economic Committee and of such New Deal agencies as the National Resources Committee and the Works Progress Administration.

One of the major recent strides toward a monitored economy within the framework of the Employment Act involves the adoption and policing of guidelines for relating wages to productivity and restraining prices. Introduced in the 1962 *Economic Report of the President,* the "guideposts" have since been energetically enforced to frustrate industry intentions to raise steel, copper, and aluminum prices. Government intervention has included threats to use "monopsonistic" market power and to release materials stockpiled for military emergency. Redistribution or withholding of federal contracts has been threatened in other instances—for example, in an effort to restrain construction wages—and federal intercession helped to undo cigarette price increases in 1966.

In 1964, furthermore, fiscal policy was used boldly to expand total economic demand and thereby reduce unemployment. A drastic tax reduction that had been wistfully contemplated for many years was daringly executed at the President's request by an agreeable Congress. Growth was spurred as the potential economic energy previously wound into the progressive rate structure became quickly converted into the kinetic energy of private spending. The popularity of this tax cut and the President's own prestige facilitated subordination of "market" decisions by industry leaders to the Executive's interpretation of the national interest.

To add concreteness to our discussion, we refer to various passages in the preface to the 1965 *Economic Report of the President.* For our purpose, it does not matter that some of the assertions are, and must remain, arguable, despite the wide advertisement of a "new economics." The Employment Act is interpreted there as a "mandate" for pursuit of "full employment" and certain other supporting objectives: "rapid growth, price stability, and equilibrium in our balance of payments." The consistency of these goals, even of their "mutually reinforcing" character, given "proper policies," is considered to have been proved by experience. The President also stated that he regards "the goal of overall price stability as fully implied in the language of the Employment Act."

Lauding "the imagination, prudence, and skill of our businessmen, workers, investors, farmers, and consumers" for their fundamental contributions to "our basically private economy," the President observed that an important ingredient had been added since 1960 "to invigorate private efforts." This ingredient is positive government policy, which provides "the vital margin of difference" for "steady, but noninflationary, growth." Indeed, 1964 marked "the first time our Nation cut taxes for the declared purpose of speeding the advance of the private economy toward 'maximum employment, production, and purchasing power.' " The President pledged new efforts to eradicate joblessness in accord with his interpretation of the Act: "*The promise in the Employment Act of job opportunities for all those able and wanting to work has not yet been fulfilled.* We cannot rest until it is."

With respect to wages and prices, the President appealed to "the sense of public responsibility of our labor leaders and our industrial leaders to do their full part." He commended the wage and price guideposts to these leaders and to the public. He cautioned that he would "maintain a close watch," would "draw public attention to private actions which threaten the public interest," and would ask "for special, detailed analysis of price or wage increases in key sectors of the economy."

With respect to job opportunities, the President placed prime reliance on "fiscal and monetary measures," but he also recognized certain structural problems that would have to be met in other ways. In addition to referring to proposals for manpower training and for strengthening the U.S. Employment Service, he noted that an "active manpower policy" is being developed "to reduce human costs, raise productivity, and make possible full employment without inflation."

Forecasting Productivity and Technology

The hazards of forecasting changes in productivity and technology will add to the frustrations already encountered in historical measurement as federal policy demands a wider variety of explicit estimates of the future. The follies committed in academic as well as journalistic discussions of the prospective impacts of, say, research and development activity and of "automation" cannot modify the government's increasing requirement for better appraisals, and they hardly assure significant or rapid improvement in techniques or in judgment. Earlier public and private efforts to forecast technological change and its implications (e.g., by the National Resources Committee and the Twentieth Century Fund) as well are more recent efforts (e.g., by the Bureau of Labor Statistics) do suggest useful study approaches. Among other things, they alert us to the importance of distinguishing stages that have different economic significance: invention, engineering development, innovation, and widespread acceptance. Even within the last of these phases, which may seem relatively well defined, a valuable lesson may be learned through reflection on the persisting and extending economic significance of an "old" invention such as the automobile in a period so rich in "new" inventions. Cliches such as the "accelerating pace of technological advance" obviously require fine-grain scrutiny in the interest of formulating relevant policy.

Since productivity outlook depends on technological and other contingencies, it may always seem foolhardy to attempt more than a "conservative" extrapolation or minor modification of past trends. Planning for action, public and private, tends to discount talk about an "accelerating pace," especially if errors of overcommitment of resources are penalized more heavily than errors of undercommitment. But experimentation with explicit—detailed and time-specific—productivity forecasting is surely desirable. Furthermore, since implicit forecasts of productivity are being generated whenever forecasts are made in studies that focus specifically and explicitly on related variables, the productivity implications should be recognized. Such implicit productivity forecasts merit explicit formulation for comparison with, or for replacement of, figures derived in some other manner.

Whatever the vocabulary one prefers, it is desirable to differentiate two kinds of forecasting and two subclasses within each.[12] These distinctions acquire new importance with the enlargement of governmental interest in employment levels and price-wage relationships. One major forecast category refers to outlook statements made by an objective or neutral outsider—an observer who does not try to affect what he anticipates. The second category refers to outlook statements that immediately involve the forecaster or his principal as an actor—statements that are intended to be fulfilled through the exertion of direct or indirect influence. Within the first main class, two varieties should be differentiated: *prediction*

---

[12] See I.H. Siegel, "Technological Change and Long-Run Forecasting," *Journal of Business*, July 1953, pp. 141-56. This paper was prepared in the course of a study made under the auspices of the Twentieth Century Fund.

(or *prophecy*), which refers to unequivocal statements about what *will* happen; and *projection*, which refers to conditional (if-then) statements about the future, to the implications of various assumptions that need not be (or may not prove to be) correct. Within the second major category, we distinguish two subdivisions: *programming*, relating to statements that the forecaster or his principal attempts to validate through manipulation of variables under direct control, through use of resources and powers under command; and *propaganda*, relating to statements to be fulfilled through influence on other decisionmakers by communication of information or opinion.

If a policymaker has complete control over relevant variables and the environment, all varieties of forecast are equivalent; and, if he can, therefore, make reliable predictions or prophecies, these cease to be of interest to him and no longer need to be made. In the more usual case, projections, preferably more than one alternative, are devised; and the persons or organizations having an interest in applications and outcomes pursue the one deemed "best" or most likely of realization through programming and propaganda. It is clear that, for the advancement of national goals, public and private decisionmakers engage in projection, programming, and propaganda activities. The federal role of "higher-system" monitor depends in some degree on the prestige and credibility of official forecasts. Interactions and dynamic effects that are induced by federal programming and propaganda should ideally encourage fulfillment of desirable forecasts (those in the "national interest") and inhibit or counter forecasts of events deemed objectionable.

Interest in forecasting has increased greatly in recent years, but it favors the broad economic indicators (e.g., national price indexes) and such aggregates as the gross national product and its major components. The shorter run seems to attract special attention, and there is an unwarranted tendency to interpret past good estimates as evidence of the improvement of forecasting art without reference to the specific circumstances involved and to the many past failures. The review of forecasting performance, however, is a wholesome activity that is becoming more evident. On the other hand, distinctions like those noted above among varieties of forecasts are still far from fully appreciated.[13]

Productivity forecasting in particular seems to be a weak and neglected art—certainly in comparison to the art of estimating the future population and labor force, which are also important factors in the manpower-requirements outlook. Perhaps, because the average annual increase in output per man-hour computed for, say, the private sector is numerically small, the task seems easy and the consequences of error seem minor.[14]

Let us look briefly at some approaches to productivity forecasting. *Econometric forecasts* are hard to make because productivity need not be significantly related in given periods to, say, investment in plant and equipment, the growth or supply of educated manpower, or expenditures for research and development. Even production and employment do not move together in the short run, and the long-run divergence is not stable from industry to industry.[15] *"Naive" forecasts,* which assume the persistence of an observed past rate of productivity increase, also lack realism. *Judgmental forecasts* naturally differ according to the knowledge, intuition, competence, and temperament of the students making them. Recent experience with forecasts of the employment implications of "automation," to which we have already referred, should warn us how erratic judgment may be when not tempered by an appreciation of history, an interest in statistical and other evidence, a sensitivity to the difference between technical feasibility and economic practicality, and a concern for the eternal distinction between scholarship and journalism.

---

[13] On this paragraph, see, for example, Victor Zarnowitz, "How Accurate Are the Forecasts?" *Challenge*, January-February 1966, pp. 20ff.; statement of G.H. Orcutt in *Improved Statistics for Economic Growth*, pp. 102-5; George Jaszi, Lawrence Grose, and Maurice Liebenberg, *Forecasting with Judgmental and Econometric Models: A Case Study* (Washington: U.S. Department of Commerce, May 1965); D.B. Suits, "An Econometric Forecast of the Outlook for 1965," *1964 Proceedings of the Business and Economic Statistics Section, American Statistical Association*, pp. 18-21; A.M. Okun, "A Review of Some Economic Forecasts for 1955-57," *Journal of Business*, July 1959, pp. 199-211; P.A. Samuelson, "Economic Forecasting and National Policy," in *The Employment Act: Past and Future* (Washington: National Planning Association, 1946), pp. 130-34; and *Business Week*, January 15, 1966, pp. 19-20.

[14] See remarks by Samuelson, "Economic Forecasting and National Policy," p. 133.

[15] Siegel, "Technological Change and Long-Run Forecasting"; an unsigned article on "Productivity: Key to Price Stability," *Challenge*, January-February 1966, pp. 24-25; and various papers included in *Manpower Implications of Automation* (Washington: U.S. Department of Labor, December 1964).

Productivity Factor in Employment and Production Outlook

The more deeply one is involved in forecasting manpower and output prospects, the more troublesome becomes the problem of choosing appropriate productivity factors. Naive forecasts are often made; for example, the figure for the last year or the average for a recent period is commonly accepted. But a seemingly conservative approach need not lead to realistic results, since annual productivity change is not smooth, and an occasional decline may be experienced. Furthermore, even past multiyear averages vary according to the length and the character of the period selected. Close students of productivity are reluctant to forecast accelerations in the annual rate of increase[16] or are content with only small upward adjustments in the rate—despite strong contrary propaganda aimed at influencing public policy.

---

[16] In *Measurement of Technological Change* (Washington: U.S. Department of Labor, July 1965), Solomon Fabricant, the leading student of U.S. productivity, stated that there is no "good basis for supposing acceleration, in recent years, in the rate of technological change" (p. 23). Fabricant prefers to estimate such change by means of a productivity index for capital and labor combined, although he also cautions against belief that "there is or ever will be a single simple measure." (Formulas for productivity referring to *all* economic inputs combined were presented by Siegel in *Concepts and Measurement of Production and Productivity*.)

This is an appropriate place at which to state that our society courts needless dangers through (1) neglect of the gaps and the more easily remediable defects in productivity information, (2) only patchy support of nonjournalistic research into the nature and implications of technological currents and prospects, and (3) inadequate attention to needs for general education on these matters for the responsible exercise of the functions of citizenship. Government manpower policy could be forced massively in the wrong direction in the absence of sufficient and more or less objective information for distinguishing between a new era and a new error. A worthy objective of public instruction is to endow "the people" (including bureaucrats) with enough "sophistication" to detect the gist of a message embedded in noise even before, say, a National Commission on Technology, Automation, and Technological Progress comes into being, deliberates, and prepares a report. The difficulty of achievement does not diminish the importance of dedication to such an objective, especially in a democracy.

Informed students and practitioners recognize and acknowledge many limitations in techniques and data that bedevil manpower forecasting. The 1965 *Manpower Report of the President,* for example, observes (p. 52) that "projecting future manpower requirements is inherently a difficult and hazardous undertaking, in view of the endless variety of technological, economic, political, and other events which may affect these requirements." An outstanding productivity authority, having had occasion recently to note the existence of aggregate productivity measures based on two sets of labor-input data (i.e., "establishment" and "labor force" figures) that do not always agree, further observed: "For some purposes, . . . the difference is a bit of a nuisance, and this is one of the sources of our problems, the fact that we don't have really very good basic statistics even on employment and hours of work."[17]

For at least three reasons, it would be desirable to project manpower requirements industry by industry (ideally, within an input-output framework) and then aggregate the results, but this approach can be pursued only part of the way. Detailed forecasting would permit averaging of the errors that arise in component estimation; allow finer examination of the prospects of particular categories of workers and of specific occupations; and preclude intrusion of an algebraic factor that occasionally distorts aggregate productivity magnitudes when these are derived directly. The authority cited above comments thus on the paucity of industry productivity series:

> Nobody is preparing current statistics on productivity by individual industries covering a substantial number of industries. I do not know why there should be such a lack of vital statistics. We need to know more than just the average, or the figures for just a few highly aggregated industrial groups. We need to have some idea of the spread among different industries.[18]

Aggregate productivity estimates are frequently used in forecasting "growth," which is commonly represented by gross national product or private-sector output expressed in supposedly "constant" prices. The productivity figures are applied to labor projections in this case. In the 1965 *Economic Report of the President,* it is observed (p. 92) that the rapid rise of productivity during the long expansion "is typical of a period of improving utilization rates" and "does not provide clear evidence that the long-term trend of productivity growth has changed." On the other hand, sustained expansion favors higher rates of investment and the introduction of advanced production processes, and these changes, according to the *Report,* should contribute to a "gradual" rise in the productivity trend although the net quantitative impact "defies careful measurement."

---

[17] Fabricant, *Measurement of Technological Change,* p. 17.

[18] Ibid., p. 21.

The occasional anomalous divergence of an aggregate productivity measure from the figures for components is only one of the many impediments to accurate forecasting. It is also a source of confusion in the administration of wage-price policy, as will be noted again later. Thus, it is possible for a measured rise (fall) of productivity in the private sector as a whole to exceed (be less than) the indicated productivity gains for the farm and nonfarm components of the sector. Moreover, an observed anomaly of this sort may disappear upon revision of the output statistics *after* it has been "explained"! The "effect of intersector manpower shifts," as this type of distortion[19] is designated in the 1963 *Manpower Report of the President* (p. 72), is normally positive and hence welcomed as a source of national productivity gain. But it can also be a source of puzzlement (and mischief), especially if it is not shown as a separate "effect." Algebraic bonuses, alas, cannot be distributed twice in the form of pay.

Productivity Factor in Wage-Price Policy

Government efforts to establish personal, puritanical "inner checks" on wages and prices once thought to be determined by market forces add to the burden on existing productivity series and on forecasting techniques. The difficulties surrounding establishment and administration of guides for "responsible" wage and price decisions have frequently been discussed by students fearing an evolution into coercion of an initially voluntary system before its eventual collapse. Some of the critics of "jawbone" controls have become keenly aware of conundrums of productivity measurement and interpretation that impede reasonable determination and fair and sound application of guideposts.

---

[19] The same kind of phenomenon can occur in the computation of single-industry productivity measures from industry-wide output and labor series, the only data normally available. Unfortunately, the absence of company or plant data precludes avoidance—or analysis—of this possible distortion in productivity estimation for industries.

As early as 1958, the President and the Council cautioned in the *Economic Report* that "wage increases that go beyond prospective productivity gains are inconsistent with a stable price level." The word "prospective" indicated that outlook is more relevant than trend; that any trend estimate employed in price-wage deliberations is actually to be regarded as a "naive" forecast. The statement as a whole has a more satisfactory tone, furthermore, than the guidepost version included in the 1965 *Report,* which seems to insist "that the percentage increase in total employee compensation per man-hour be equal to the national trend rate of increase in output per man-hour." This kind of statement may gratuitously encourage emergence of a new questionable concept—a guaranteed annual wage increment equivalent to the guidepost productivity percentage. Widespread expectation of such an annual rise, reinforced by an annual increase for federal workers in conformity with guideposts relating to the private sector,[20] could easily undermine a national policy of quasi-voluntary restraint. The language of the 1966 *Report,* comparable to that of the 1965 *Report,* also seems less satisfactory than the wording of the 1958 statement cited above.

Another feature of the 1958 *Report* is the general stress on improvement of federal statistics, including productivity. In a special appendix on productivity, temporary and minor discouragement was given to the emerging cause of guideline specification—by the inclusion of (1) two sets of productivity measures for the private economy and its two major components and (2) an extensive account of "problems of measurement and meaning." Among the problems mentioned were: the theoretical multiplicity of plausible productivity measures, the dependence of meaning on the data and methods actually used, the danger that an aggregate productivity measure may lie outside the range of the measures for components, the frequent need to substitute "gross" output data for desired "net," the nebulosity of output indicators that have to be derived by means of vaguely relevant deflators (as in the case of the service industries and research activity), the multiplicity of conceivable labor-input concepts, and the nonequivalence of labor series for hours remunerated and hours worked.

---

[20] A statement made in a National Planning Association publication, *Looking Ahead,* February 1966, p. 7, ignores the inflationary potential (both direct and indirect) of annual increases for federal workers in accordance with private-sector expectations: "The guidelines gain in persuasiveness when the Federal government adheres to them with respect to Federal workers."

The 1962 *Economic Report of the President,* which explicitly advanced the guidepost concept "as a *guide* rather than as a *rule* for appraising . . . behavior," acknowledged existence of measurement problems and of difficulties of choice among alternative indexes that may disagree. It noted that year-to-year fluctuations in productivity change complicate the selection of a trend, and that the part of change reflecting variation in capacity utilization should be isolated from trend. It also made the important point that, when comprehensive productivity measures are used as "benchmarks" for wage adjustment, allowance has to be made for the changes they reflect in occupational composition and in grades.

In 1965, a former chairman of the Council of Economic Advisers made reference to many inadequacies of the statistics in his strongly critical commentary on the guideposts.[21] He felt that the price criterion would require every company to know its own industry's productivity trend in relation to aggregate experience. The present and prospective condition of the public information base, however, rules out such comparisons:

> The productivity indexes now being published, besides being often out of date, lump together a great variety of products. In time, more detailed and more current indexes of productivity will doubtless be constructed, but there are limits to what is statistically feasible. Even if measures of this type become available for each of a thousand or ten thousand industries, much confusion or perplexity will still remain.

Among the additional "puzzles," he too refers to the danger that the wage guidepost may suggest general entitlement to a wage increase already "granted" in part through payments reflecting an increase in average skill composition of the work force.

Another informed student, answering an inquiry of the Joint Economic Committee in 1965, pointed to a timeliness gap in the reporting of data on fringe benefits, requested an increase in the number of industries represented by individual productivity indexes, and called for comparable coverage of the hourly earnings and productivity measures. "It would then be possible," he observed, "to estimate unit labor costs for a larger number of industries and, hence, . . . to identify the extent to which cost pressures develop because of higher labor costs and conversely."[22]

---

[21] A.F. Burns, "Wages and Prices by Formula?" *Harvard Business Review*, March-April 1965, pp. 55-64.

[22] Jules Backman, in U.S. Congress, Joint Economic Committee, *Improved Statistics for Economic Growth*, pp. 2-3.

Suggestions on Guidelines

We conclude this essay with four suggestions, the first of which is to consider afresh the theoretical and statistical requirements of an ideal guidelines system. An improved system should be available for later "peacetime" periods in which guidepost monitoring may seem appropriate and in which "policy escalation" to formal wage and price control is unwanted. Important insights for improvement would be afforded by a patient test of the numerical differences between (1) available pertinent indexes that merely satisfy the verbal algebra and (2) *ad hoc* indicators for the same variables constructed according to the principles of literal algebraic consistency. A productivity measure derived from aggregate information for an industry, a combination, or a large sector need not be arithmetically equivalent to a productivity index designed for use in conjunction with others for wages and prices. Comparisons should also be sought, of course, for alternative wage and price measures.

The second suggestion is to consider the use of explicit productivity forecasts (preferably "predictions") in wage-price guidelines when future quasi-voluntary efforts may again seem warranted. Availability of *both annual and longer term forecasts* would be desirable, with the *more conservative* of the two figures serving as the preferred guide for decisions in a particular year. These figures, however, should be the *same* as, or *compatible* with, those used or implied in estimation of the gross national product, its major components, and other key variables in the *Economic Report of the President.*

Third, "real" wages deserve attention as well as "nominal" wages in the definition of any future guidepost policy. Unfortunately, wholesale prices seem to be of much more interest than consumer prices in the discussion of inflationary prospects. If consumer prices were introduced into the stabilization criterion (for adjustment of the nonfringe component of wages), greater official notice would have to be given to, say, the type of long term inflation that has actually been occurring in the services. Persistently rising prices of services (which account nowadays for much of the average employee's budget) stimulate new wage demands, handicap cooperative union leaders, and typically lie beyond the reach of federal monopsony power. Of course, cost-of-living adjustments could not reasonably be superadded to those based on productivity when consumer prices rise significantly—if equity *and* inflation control are to be pursued jointly.

Finally, the wage guidepost should be restated in an algebraically equivalent form that is simpler and has certain clear analytical and administrative advantages. It does not seem to be generally appreciated that the usual criterion for assuring control of unit labor cost is the same as the following guide: *that the percentage increase in payrolls should not exceed the percentage increase in volume of output.* (If the second of the suggestions made in the preceding paragraphs were adopted, the word "prospective" should be introduced before "percentage increase in the volume of output.")

This restatement makes it easier to understand what to do in the face of intersectoral shifts, changes in skill and occupational mix of the work force, and the persistent increases in living costs.[23] Furthermore, it dramatizes the adjacency of the domains of the Federal Reserve Act and the Employment Act of 1946, for monetary policy too emphasizes the role of prospective increases in output. According to the traditional formula for restraining inflation, "the growth of the money supply must be held to a rate that approximately corresponds to the expected rate of growth in real output of goods and services."[24] A common border is thus identified between the informal guidepost approach and the conventional approach deemed more appropriate to containment of diffused and increasing inflationary pressures—the classic "demand-pull" situation.

---

[23] The criterion might also be adjusted to refer to "real" payrolls—to give another, more explicit meaning to the concept of maximum "purchasing power" embodied in the Employment Act.

---

[24] "Guidelines Won't Do It Alone," *Business Week*, January 15, 1966, p. 148.